THE

MEDICAL AND SURGICAL REPORTER.

No. 1575.] PHILADELPHIA, MAY 7, 1887. [VOL. LVI.—No. 19.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

THE HYPODERMATIC USE OF BIMURIATE OF QUININE AND UREA IN THE PRACTICE OF MEDICINE.

BY R. P. TALLEY, M. D.,
Of Belton, Texas.

Doctors of medicine, like trees, begin to die when they cease to grow.

Before entering upon my subject I must crave the indulgence of those who heard me at Tyler in 1883, and at Belton in 1884—And for reasons to wit:

1st. I hope here to answer some criticisms made in the discussion of my paper on this subject at our meeting at Belton, and some others contained in *The Texas Courier Record of Medicine*, vol. 11, No. 1, page 61. 2d. The errors by myself and the publishing committee contained in this paper as published in the transactions of the Texas State Medical Association for 1884, are so many and of such character as to render it almost worthless to convey the ideas I intended, that I am constrained to try once more to do better. (*The publishing committee started out by heading my paper* BICHROMATE *instead of* BIMURIATE OF QUININE AND UREA.) More! notwithstanding the noise I've tried to make on this subject, I have heard but little, either directly or indirectly, from the profession; and having had some experience since our meeting at Belton—some of which is almost too sore to tell—I hope that by raising the question again to further advance the doctrine of Hypodermatic Medication with Quinine—therefore, will those who can have no interest in this matter, pardon me for my (I hope not too great) enthusiasm on this subject. I want it distinctly understood that I am not writing to urge the importance of the use of quinine in the practice of medicine. I believe that all the world now considers its use to be the most important treatment yet discovered for all purely malarial diseases, as well as of much value in many other "ills to which flesh is heir." But I do want to insist on the importance of the use of this particular preparation of quinine, and upon its administration in proper doses—doses not too large—by the hypodermatic method, in preference to *all* others in *all* cases of any severity.

I will now give, as briefly as I well can, some of my personal experience and observations in the management of malarial diseases with quinine and its salts in Central Texas during the last eighteen years.

In 1867, August 3d, I made my first professional visit in Texas, near Davilla, Milam county. It will long be remembered, that from about 1866 to 1870, almost our entire population suffered severely from malarial disease, and especially from what was known among the laity as "black jaundice," which many physicians now call "malarial hæmaturia." The practice where I was then located, was *fearfully* routine: quinine, calomel, and purgatives, in almost every case, made up the work of the doctor. A physician knew about as well what would be his treatment before he saw his patient as he did afterward. The laity believed so much in purgatives, pills, and especially some form of mercury, that if they could not get them any other way, they would take some even in spite of the doctor.

I noticed in such practice a difficulty in getting any effects from quinine, even the symptoms of its physiological action, especially for several days in the beginning of the treatment of cases of any severity. I was told by some professional friends of more experience than myself, and I also read from the little current medical literature at my command at that time, that the system must be first prepared for the quinine by the use of mercury, purgatives, etc.; and again from the same source of information it was urged that if quinine was not absorbed by the stomach, the secretion of which is normally acid, it would likely become entangled in mucus, etc., and pass into the small bowels, and that here, the secretions being normally alkaline, the salts of quinine would be very insoluble, would not be likely to affect the patient at all. I next tried and succeeded much better with sulphate of quinine by the mouth, in solution in plenty of water and sulphuric acid quantum sufficit. But this preparation was so very disagreeable to take, and it was so difficult to keep the stomach from rejecting it, that my patients called loudly for some way of taking their quinine not so disagreeable. All of this I found, after much sore trial, did not give any satisfactory information or results; I found that in many cases my patients would not complain of the characteristic effects of quinine until after three or four days' treatment, or in other words, *after convalescence had actually set in notwithstanding the daily rations of the drug.* In this experience it occurred to me that perhaps it was well for the patient that quinine by the stomach in the beginning of malarial fevers should not be absorbed, because, being mixed up more or less with vitiated matters, almost always in the alimentary canal in such cases, if absorbed it would likely carry with it other foreign matters not good in the circulation, and that nature would in many cases succeed in resisting the disease as well as the doctor.

On one occasion, several years ago, I was called to see an orphan negro boy, who was very sick with remittent fever, and who had no friends to give, or even urge me to give, the traditional mercury and purgatives. I gave him 10 grs. sulphate of quinine made in pills, with aromatic sulphuric acid, every morning, with all the fluids and nourishment he could be induced to take. This treatment was continued for three days, during which time he drank and retained some water and a good deal of buttermilk. He improved every day, and on the evening of the third day I gave him a full dose of castor oil, yet his bowels did not move for about twelve hours, the actions from which were saved for "the doctor to look at." I of course examined them carefully, and to my surprise found eight of the twelve pills above referred to.

This was my first tangible, physical evidence that the salts of quinine might remain in the alimentary canal so long and not be absorbed. But I have frequently since seen cases essentially similar. Not long ago I gave a little girl, about ten years old, sulphate of quinine in capsules—the quinine made into mass with citric acid and water, from Wednesday until the following Saturday. She improved every day, and on Saturday morning I examined a spontaneous action from her bowels, the first while taking the capsules, and found several doses, the capsules gone, but the mass not perceptibly less than when put into the capsules.

We read from some eminent scientific experimenters, that in health ordinary doses of quinine by the stomach may all, save about four per cent., be recovered from the urine in from six to twelve hours after taking it. But they also say that in disease it frequently does not make its appearance in the urine for several days; therefore I conclude that when our patients most need quinine they may get the least of it when we attempt to administer by the stomach.

Cases similar to that of the little girl above mentioned, have been observed by many of my professional friends with whom I have communicated on this subject since our meeting at Belton.

This experience, and that of frequently finding patients who would only speak of the characteristic effects of quinine after taking it from three to five days, either in powder, pill, or capsule, the patient most frequently improving in the meantime, but sometimes dying—*perhaps*, simply for the want of the constitutional effects of quinine—has given me a great deal of trouble in the practice of medicine here where we have so many malarial diseases with which to contend, especially since all the medical world so earnestly insists that quinine is the very best drug with which to treat all purely malarial diseases, as well as all troubles even near akin to malarious affections.

At times I have become so skeptical in regard to its use by the stomach that I have been seriously tempted to use some substitute perfectly inert, something that would at least do no harm, as quinine no doubt frequently does. I am satisfied beyond any reasonable doubt that if the United States had on hand

to-day the quinine that has been uselessly and harmfully used during the last twenty years, it would "go begging" at a nickel an ounce. There would be no quarreling in our Congress about import duties on it. M. Michel Levy informs us that "at the Lille Military Hospital, the physician in charge *cured intermittent fever* (italics mine) with pure water, which he dispensed in vials labelled "Protoxide of Hydrogen." Please take due notice that the physician in charge of Lille Military Hospital says he *cured intermittent fever* with pure water dispensed in vials, etc. Would it not have been better and nearer the truth for him to have conveyed the idea—the abstract fact—that his patients got well of intermittent fever *while* they used pure water dispensed in vials labelled "Protoxide of Hydrogen?" His cure with pure water in this way is a parallel of my patients above mentioned, who got well of malarial fever *while* I give quinine, the quinine having no effect at all. Cure thus carelessly asserted has done more to retard progress in what is known as curative medicine than any other word in use. Too many physicians are too often so anxious to see themselves efficient agents rather than interested spectators that they wholly neglect or otherwise fail to see their blunders. To us as physicians, it is sickening and discouraging in the extreme to see so many of our observations so vitiated by tangible errors as to render them worthless, as having surely done great harm. We can only be saved by the doctrine that "the moral quality of an act resides in the intention," when possibly we ought to look for distinct and definite results in medicine. Reports of failure when intelligently made are worth more than those of success, which are too often only *apparently* so. I believe it is a good idea for a physician "never to believe anything in medicine as long as he can help it." "The study and practice of medicine are wonderfully calculated to steal away a man's common sense." (My Note Book, Bowling.)

But notwithstanding all this, I am compelled to have much faith in quinine in the treatment of all malarial diseases, especially since my experience with it for nearly four years by the subcutaneous method of administration. I have been studying and watching medical literature the very best I could for several years for some preparation of quinine that could be used efficiently with the hypodermatic syringe. Formula upon formula has been published for the last thirty or forty years for preparing the various salts of quinine for hypodermic use, but all of them with but one exception, so far as I now know, are so defective for reasons not here necessary to give, that I have used them only as a last resort, notwithstanding that medical literature as well as my experience in regard to their use are very encouraging in many respects.

About four years ago I read in Prof. Bartholow's third edition of "Hypodermatic Medication," as follows, to wit: "*Very recently* (italics mine) a new compound salt of quinine has been introduced for hypodermic injection, and it *seems* (italics mine) to possess very distinct advantages over all other preparations hitherto proposed. It has been termed quinia bimuriatica carbomidata, and is formed by Drygen from a combination of twenty parts of muriate of quinia, twelve parts of muriatic acid, and three parts of urea. The resulting salt is soluble in *equal parts* of water (italics mine)." He further says, "The trials that have been made of it at Hamburg have proved so successful that it is highly desirable it should be known more widely. A 50 per cent. solution has always been employed, and the quantity injected has varied from a half to three syringefuls. The local irritation was in most cases very slight, and at the worst consisted in a circumscribed burning pain, without redness or swelling." When I first read this I felt as if I had captured a prize, the value of which in the practice of medicine could not easily be overestimated, unless quinine has been by all the medical world up to this date fearfully overestimated.

Over three years ago I wrote Prof. Bartholow for reference to any literature on its use hypodermatically, besides what was contained in his 3d ed. on "Hypodermatic Medication." He soon answered as follows:

"1509 WALNUT STREET,
"PHILADELPHIA, *March* 17.

"*Dear Doctor:* In reply to your note, I have to say that all the information possessed by me on the subject of the subcutaneous use of quinine and urea is contained in the 4th edition of my Manual of Hypodermatic Medication.

"There have been incidental references to the subcutaneous injection of quinine, and to this preparation, but there have not been brought forward any actually new facts.

"Very truly,
"ROBERTS BARTHOLOW."

I then very soon obtained his 4th ed., and found that it contained substantially the same and nothing more than the 3d ed. on this particular subject. About one year later I wrote Messrs. John Wyeth & Bro., of

Philadelphia, to please give me the difference in the chemical composition of sulphate of quinine and bimuriate of quinine and urea, especially in regard to the amount of quinine contained in each. These gentlemen replied as follows:

"PHILADELPHIA, PA., *March* 8, 1884.

"DR. R. P. TALLEY, BELTON, TEXAS.

"*Dear Sir:* Your esteemed favor came duly to hand, and in reply permit us to say, that the salt in question (bimuriate of quinine and urea) has been extensively used of late in Philadelphia and its vicinity. There have been so many formulas given that for the present we prefer to withhold any comments on them. We herewith hand you an extract taken from the *Druggist's Circular* in relation to the preparation.

"We take pleasure in handing you the formula showing the different amounts of quinine contained in each preparation—of sulphate of quinine and of bimuriate of quinine and urea, viz:

"Sulphate of quinine=alkaloid, 73.134; Bimuriate of quinine and urea=alkaloid, 61.36; or about this percentage. * * * * *

(Signed.) "Yours truly,

"JOHN WYETH & BRO."

So we see that the new preparation contains a little less of the alkaloid (quinine) than the sulphate of quinine, and this in using the new preparation is important to know, inasmuch as our doses must or ought to have reference to the active principle contained in them, rather than to anything else simply to prepare them for use.

While the above detail is too tedious for a meeting like this, it goes to show *some* of the troubles we have to encounter in the practice of medicine.

I will now give a few cases to illustrate my experience in the use of this new preparation of quinine.

Case 1. I treated my first case October 1, 1882. It was a boy about ten years old, who had been sick two days with intermittent malarial fever. When I first saw him I found his temperature 105½°, pulse 120, respiration 30 to 35, vomiting every few minutes, cold extremities, and almost complete coma, with twitching of the muscles of the right side of the whole body. Bowels had been moved several times with "Simmons' Liver Regulator," and he had had several domestic doses of blue mass and sulphate of quinine during the last two days. I gave at about 10 a. m., hypodermatically, sulph. of morphine, gr. ⅛, sulph. atropine gr. $\frac{1}{100}$, bimuriate of quinine, and urea gr. x. in water, ℥x. Ordered a warm sponge bath to the whole surface of the body, and for him to have all the iced lemonade he could be induced to take. At 6 p. m. temperature 102°, and a corresponding improvement in every other respect. Did not vomit after taking the hypodermatic injection—an important effect of the morphine and atropine perhaps—and had drank freely of the lemonade. He convalesced favorably and rapidly without any other drugging, and did not relapse, as is so often the case in such diseases.

Now, in this case I want to call attention to this, to wit: That the convalescence was of but little value as reliable evidence as to the direct efficiency of the treatment, only in that the patient did not relapse, because, in my judgment, such cases have a natural tendency to convalesce after the third paroxysm, but also a natural tendency to relapse in from seven to fourteen days etc., according to their type, and this boy already having been sick three days with the every-day type of malarial fever, perhaps was just ready to get better any way.

Case 2. November 5th, 1882, about 2 o'clock p. m., I saw Mrs. I. at the request of her husband, from whom I got substantially the following history, which I regarded as about correct, inasmuch as he had about ten years' experience in a retail drug store: Patient had a chill on the 2d and 3d inst., followed by fever and sweating as in ordinary intermittent malarial fever. On the 4th inst., she seemed a little delirious, but took some nourishment in the morning as on each of the two previous days; but early in the afternoon she fell from her seat in a spasm, and had been in a profound coma ever since, with frequent convulsive movements. The family physician was sent for and arrived soon after the spasm came on. He gave a hypodermatic injection of morphine, ordered mustard plasters to her spine, and then tried to control the convulsive movements with chloroform by inhalation.

About 8 or 9 o'clock p. m., he left her no better, instructing her husband to give her chloroform freely, and not to be afraid of it, and to let him know if she got better, and gave as his opinion that she was suffering from malarial toxæmia. But little chloroform was used. The family physician was sent for and arrived again about daylight the following morning. He in vain tried again to control the trouble with inhalations of chloroform. and about 8 or 9 o'clock a. m., left her to her fate, saying to her husband and friends that nothing more could be done

for her, and that he thought she was then dying and would likely be dead within an hour. On my arrival, I found her condition about as follows:

Pulse 120, full and bounding; respiration 25 to 30, very labored and noisy; temperature 106°; eyes wide open, the pupils turned up and dilated to their fullest extent, and the conjunctivæ intensely congested. Her hips were almost enveloped in involuntary actions from her bowels and bladder. The upper extremities more or less flexed, the lower straight, and both in a constant spasmodic condition; the head drawn back and to the left. The coma at this time was profound. She had not had anything, not even water, by the mouth for about twenty-four hours, and could not then take anything, paying no attention at all to anything put into her mouth. I diagnosed the trouble pernicious malarial fever, with very unfavorable prognosis, and treated the case as follows:

I first had her clothes all taken off and her whole body well washed in tepid water, then placed in a clean bed between two open doors, with no covering except a sheet. I then gave subcutaneously sulph. of morphine, gr. $\frac{1}{8}$; sulph. of atropine, gr. $\frac{1}{60}$; bimuriate of quinine and urea, gr.xv, in solution in water, ℥xx. Also ordered a pint of warm water to be slowly injected into the rectum, and to be kept in by force for one hour, about every four to six hours. The whole body to be sponged every hour with warm water, until my return about six o'clock p. m. Within ten minutes after the subcutaneous injection the respiration and pulse were very much improved, and she never had any more of the spasmodic movements above referred to. At 6 p. m., temperature 102°, and some improvement in all the other symptoms. I added some covering and ordered the treatment otherwise continued, except to give her water by the mouth instead of the rectum, if at any time she could so take it, and also discontinued the warm sponging, unless the skin seemed to get hot and dry again.

Nov. 6th, 8 a. m., about as at last visit, except with the water enemas a great deal of fecal matter with some urine had been involuntarily discharged, and she had uttered in a sort of delirious way several indistinct words, the first attempt to speak a word in any way for over thirty-six hours. I repeated the hypodermatic injection and ordered the other treatment continued. At 6 p. m., I found her very much improved in every respect. She had voluntarily taken plenty of water, but yet had considerable delirium. I ordered milk gruel or buttermilk as nourishment, and all the lemonade she could be induced to take as drinks.

November 7th, 8 a. m. About as at last visit, except some improvement in the delirium, but would occasionally utter the most hideous delirious screams I ever heard from any one, under any circumstances, and had taken some nourishment and freely of lemonade. I repeated the hypodermatic injection, and ordered the other management continued. At 6 p. m. decidedly better in every respect.

November 8th, 8 a. m. Dismissed the case with special instructions as to food, etc. Will note here that the temperature was never over 101° after the first day's treatment. Patient made a rapid recovery without any further drugging, and had not up to April, 1885, had another attack of malarial fever.

Case 3d. August 12th, 1884, I saw a child two years old, who had been very sick for three days with remittent malarial fever. At my visit (about 3 o'clock, p. m.) it was in a deep coma, and its temperature 106°. Its family had been living in the Leon river bottom for some months, and the child had several attacks of malarial fever during this time, and was then very anæmic. It had been treated—domestically—with a large quantity of sulphate of quinine and some calomel, during this immediate attack, and had taken, as its father said, "a bottle of quinine in the last two or three months." For treatment I gave bimuriate of quinine and urea, gr.iv.; sulph. of morphine, gr. $\frac{1}{12}$; sulph. of atropine, gr. $\frac{1}{240}$, in solution in warm water, q. s. Then ordered a warm sponge bath every thirty minutes until the child could swallow (if ever), and then to have all the buttermilk and lemonade it could take until it was decidedly better. Two days later I was informed that the child was still living, and that while it was better in every way, its parents wanted me to see it again. At this second visit I found the little fellow looking fearfully pale, very weak, somewhat deaf, a little fever, and poor appetite. After giving careful advice in regard to diet, etc., I gave—with doubt as to its propriety—another dose of the hypodermatic injection. About four months after this I learned from the child's father that it got well right away, and had been well ever since, except that it was still "very hard of hearing," but that his other children were "chilling right along," and had been for about six months.

Case 4th. The following case has been the sorest of my experience with this treatment, although it *may be* that some have died by the injudicious use of this or for the want of a better treatment.

In 1883, September 11th, Mr. D. called me to see his son, who was about ten years old, poorly developed, and had had malarial fever, to my own knowledge, from time to time for several months, during which time he had been living in the Leon river bottom. He had been sick with this attack about three days, in which time his father had consulted me at my office every day, and I had at each of said consultations prescribed the routine treatment, to wit: Sulphate of quinine, mercury, lemonade, etc., by the mouth. At my visit in the morning his temperature was 104°, and so much delirium that it was almost impossible to get him to take anything by the mouth. His delirium was very much like delirium tremens. In this case I shall only give in detail the hypodermatic part of the treatment, and, as I think, its results. Suffice it now to say that I gave half of the hypodermatic dose used in case 2d. At about 4 o'clock p. m., his temperature was 101½°, with other improvements, except we could not get him to understand what we wanted him to try to do. This condition I then took to be from delirium, but now think it was from deafness. The next morning I found him in the same condition, except he had taken some milk and plenty of lemonade and some water, and would gaze at persons about his bed with a sort of wild expression of countenance. Fearing another paroxysm, I "popped in" (an expression peculiar to quack doctors of medicine) another dose of the hypodermatic injection and with it, I *now* think that I popped his capacity to ever hear again out of existence. At least I *know* he could hear up to a short time before my first visit, and also that he has not been able since to hear a watch tick resting firmly against his ear. Also the history from his father is, that his son had had several "risings in his head and running from his ears," when younger, but there had not been anything wrong with his ears for some time before I treated him, and that there had not been anything wrong with his ears since so far as he could tell, except his deafness. The only consolation I have in this error in practice (if it is one) is that with the kind assistance of Dr. R. H. Chilton, of Dallas, Texas, and a good lawyer of my town, the patient has been in the deaf and dumb asylum at Austin, Texas, for nearly two years, and has so much improved in every respect, except in his capacity to hear, that when he again mixes with his family he hardly looks like one of the same tribe, notwithstanding his parents are just as clever as any poor people, living on a rented farm, well can be.

Now, I believe in my great anxiety for him I gave this poor boy too much quinine—in other words, I over-treated him, as we poor mortal doctors too frequently do. That is, where our patients most need our cool and calm judgment, judgment is out and anxiety with too much desire to be efficient agents is in, upon the physical principle, that "two bodies cannot occupy the same space at the same time."

Dr. Chilton saw this boy April, 1884, and after carefully examining his ears, gave it as his opinion that such organic changes had taken place that no sort of treatment could possibly cure or even benefit him materially. Since writing the above I have had a conversation with Dr. Chilton in regard to the effects of quinine in producing this boy's deafness and he (Dr. C.) insisted that he cannot believe the quinine had any bad effect in this case, and that I was in all probability wrong in charging myself with the boy's deafness. Having a high regard for Dr. Chilton's opinion as a specialist, I concluded to reinvestigate the subject before blaming myself too much in this case and in such practice. So I did, and will offer authority for my conclusions above and such as may follow, to wit:

In "A Practical Treatise on the Diseases of the Ear, by Prof. Roosa," ed. of 1883, pages 619 to 626, he says, "In a paper read by me before the Society of Neurology and Electrology in April, 1874 (which was published in the American Journal of the Medical Sciences, vol. lxviii, page 400), I classified four cases of congestion and *inflammation* (italics mine) of the base of the brain and labyrinth, caused by the internal administration of quinine. My remarks at that time led to a discussion in which Drs. Jacobi and Hammond participated. To attempt a settlement of some of the questions involved, I undertook some experiments upon the human subjects, as did Dr. Hammond upon animals. I believe these were the first experiments to determine the effects of quinine upon the ear. They have been followed by others, and considerable clinical experience has been duly published as to the effects of quinine upon the eye as well as the ear, so that the views of the profession is now clearer than before the subject was thus opened up." * * * "Fortunately most of the cases of

deafness caused by quinine fully recover. In some however, most deplorable results occur."

Kirchner states as the result of his experiments that "quinine causes (*i. e.*, may cause) inflammatory processes and permanent pathological changes in the ear."

Orne Green (*Boston Medical and Surgical Reporter*, vol. cviii., p. 220), after reviewing the literature of the subject and giving his own large clinical experience, quotes Prof. Roosa's views and their corroboration by Kirchner, with approbation, and states: "From our present knowledge, both clinical and experimental, we are justified in asserting that the action of quinine upon the ears is to produce (i. e., in large doses, if I understand him) congestion of the labyrinth and tympanum, and sometimes distinct inflammation with permanent tissue changes."

After studying medicine the very best I could for about twenty-five years, I am sorry to say that I am in more or less doubt as to whether quinine has up to this date been a blessing or a curse, even in the hands of those who claim to be REGULAR DOCTORS OF MEDICINE, to say nothing of the miserable haphazard manner of using it by quack doctors and the laity the world over. So much for Case 4 at the present.

To detail any more cases treated in the manner indicated would make this paper too long, especially since medical literature and experience furnish abundant evidence that the hypodermatic method of using quinine in the treatment of malarial diseases is beyond any reasonable doubt far superior to any other mode of using it yet discovered. With a single proportional dose of the above indicated hypodermatic preparation I have frequently relieved, *as I thought*, children suffering from the worst forms of malarial fever, and without any other drugging and without a single so-called relapse, so far as I now know.

Dr. Casseaud treated (so says Dr. Bartholow), in the hospitals at Smyrna, one hundred and fifty cases of malarial fever by the subcutaneous injection of quinine (he does not say what preparation), and had but one relapse. Prof. Bartholow, of Philadelphia, Pa., says, in speaking of Dr. Casseaud's success; "Such have been my own observations." Dr. Moore, of the Bombay Medical Service, concludes "that four or five grains of quinine injected beneath the integument are equal to *five* or *six times that amount* (italics mine) taken into the stomach."*

*According to this experience you see not only the force of this method of using quinine, but also my error in the Case 4 above reported.

With the hypodermatic preparation used in the treatment of the four cases above detailed, I have only *quinined* a few cases of pure typhoid fever, and in all, I think, with more or less doubt as to my good results, especially as a direct antipyretic. But Prof. Bartholow says: "The antipyretic effects of quinine are constantly made use of in the treatment of continued fevers, as all the world knows, the treatment being by the mouth." I cannot believe much in the direct antipyretic effects of quinine in typhoid fever. Perhaps it is of service in such cases in its effects in controlling pyæmic and septic conditions. At any rate, under no circumstances can I be induced to give quinine in such enormous doses as many physicians warmly advocate.

I know that some of my professional neighbors are in the habit of giving from ʒi. to ʒii. in twenty-four hours; some even give ʒss in twenty-four hours. A professional friend of mine not long ago gave his own daughter ʒi bimuriate of quinine and urea with morphine and atropine, in four doses in twenty-four hours, and yet no apparent bad effects followed. But she has a serious eye trouble (just the nature of which I do not know) which he says followed a serious attack of fever for which he used a very large quantity of quinine. It is my opinion that in the use of large doses of quinine, by the mouth, one of three effects may be expected with more or less certainty, to wit: 1. It will have no effect at all, not being absorbed; 2. A certain per cent. *may* take effect; 3. It may all be absorbed, and if so, will always do some harm and sometimes serious mischief. Hence, I must insist that when administering it by the mouth we do not and can not know where it is or what effect it will have for good or for evil. Many worthy and reliable observers insist that too large doses of quinine will not only produce permanent injury, especially to the eye and ear, but also actually death, in many cases, especially when co-operating with some fearfully diseased condition of the system. I am satisfied beyond any reasonable doubt, that many deaths reported as caused by "brain fever" and "congestion," etc., etc., were in fact caused by the injudicious use of quinine, even—I am sorry to say—by some of our very best men in the medical profession.

How many eye and ear troubles are looked upon by the average physician, and even some aurists and oculists, without any regard whatever to quinine as even capable of producing such misfortunes. A general practitioner of medicine, or an oculist and

aurist, let him be ever so well qualified and authorized, without regard to "race or previous condition," whether German, Jew or Gentile, if he does not recognize quinine as even capable of doing harm to so delicate an organ as the eye and ear, will surely not look for, and hence most likely not find, cases of defective sight and hearing due, in whole or in part, to effects of quinine.

I may feel the importance of the subject of the POISONOUS EFFECTS of quinine too keenly, but if so, I hope by throwing the question into the Association with all the force in my power, to raise such discussion as will likely better inform me and perhaps some others.

Granting the great importance of the use of quinine by the stomach, as insisted upon by our honored medical authors, to wit: Prof. Bartholow, as above quoted, and also many others, how much *more* important it would be, used subcutaneously, is simply beyond my capacity to estimate, especially since we now have a preparation so entirely free from danger of producing abscesses, when carefully handled. Hypodermatically used, we have *positive* evidence as to *where* it is, hence our observations as to its good and bad effects are of some real value, such as cannot be had by any other mode of using it yet brought to light.

During the first two years of my experience with the hypodermatic injection used in the treatment of the fever cases herein detailed, I did not produce a single abscess. Up to this time I had my solutions prepared at a drug store, but these solutions would not keep well, spoiling more or less rapidly by the development of the penicilium, and an increasing tendency with the age of the solution for the salts to precipitate and perhaps some chemical changes also. I then carried the salts in definite quantities and made extemporaneous solutions, by adding water only sufficient with heat at about 100°. With this I evidently produced some splendid specimens of abscess. I then changed my tactics again, and began making my extemporaneous solutions not so concentrated, say 15 grains of the salt of quinine to at least 20 minims, since which time I have not had an abscess from its use, *i. e.*, when I could reasonably control my patients until time for inflammatory processes not to be expected; e. g., not long ago I saw a man about sixty years old who had been "chilling," as he said, about every two weeks. On the day of my visit, which was Sunday, he had had a chill in the morning, during which he was not apparently much sick, as his wife said, but was somewhat delirious, and went to church in spite of his family, and while there had "a fit or fainting spell, one or the other," and had to be carried home by force. When I saw him he was more or less delirious, with a temperature of 105°, I gave him hypodermatically, bimuriate of quinine and urea gr. viiss, sulphate of morphine gr. $\frac{1}{3}$, sulphate of atropine gr. $\frac{1}{75}$, in water q. s.. I then advised that he would likely need some further attention from some physician, but any way, if he seemed to do ever so well, he had better remain in and take good care of himself, and especially his arm where I had injected the medicine. But he worked in his blacksmith shop the two following days, and on the third hunted me up to abuse me for making his arm so sore that he could not work. In about a week later, he had his arm lanced, the physician operating expecting to get pus, but only got some nearly clear serum.

From the use of this hypodermatic treatment, I am sorry to say, many of my professional friends and neighbors have had ugly abscesses to contend with. Of course, in such cases they were willing to call it "Talley's treatment," especially if they produced an ugly abscess on some handsome, or expected to be handsome, arm. In reply to this, I want to say in a friendly way that in all such cases the patient, in my judgment, needed a physician to begin with.

The important details in making a hypodermatic injection are too many to be given in a paper like this. I have for many years made hypodermatic injections as *deep* and as *slowly* and as *little* at *one point* as possible, for the following, as I think, very particular advantages over the usual method: 1. It gives less pain; 2. It takes effect sooner; 3. It is not so likely to produce abscess; 4. There is comparatively no danger of injecting more than a few drops directly into a blood vessel, an accident that we all want to avoid. This fourth advantage I try to obtain by first introducing the syringe needle as deeply as I well can; then I throw out one or two minims at different points as I very slowly and cautiously withdraw the needle.

In reviewing my paper on this subject, as read before the Texas State Medical Association in April, 1884, *The Texas Courier-Record of Medicine*, Vol. II., No. 1, page 61, says, in referring to my manner of using the hypodermatic syringe: "En-myonic would be the correct name for it, not hypodermic." Like the reviewer, in part, I now do not think the word hypodermic the proper one to use, hence no longer use it. In Prof. Bar-

tholow's "Hypodermatic Medication," pages 30 to 60, he says: "This word hypodermic is condemned by all scholars, who are unanimous that the term should be in accordance with the rules of construction—hypodermatic." That eminent philologist and oriental scholar, Mr. Fitzedward Hall, D. C. L., assures me that under no circumstances is the word hypodermic allowable. * * * He (Prof. Bartholow) further says: "By this" (hypodermatic) "method the medicament is introduced beneath the skin, usually into the subcutaneous areolar tissue, *but also into the muscles*" (italics mine.) Now I think that in all candor the name "enmyonic" for this operation is the least appropriate of any yet proposed.

I want just here to call attention to the fact that in the paper of mine above referred to I *never once intimated* that I confined my injections to the muscles. In the same review just above referred to it is said: "We cannot understand how a preparation of this kind which contains not quite two-thirds of quinine in the dose administered, would be any better than an extemporaneous preparation of a solution of quinine in dilute muriatic acid."

In reply to this, just let me call attention to the fact that it requires 1600 parts of water at 59° Fahr. to dissolve one of quinine. While it is freely soluble in dilute acids, it only requires a little common sense to enable one to "understand how a preparation" of bimuriate of quinine and urea, *which is soluble in equal parts of water*, is better than the alkaloid quinine which is *soluble in not less than* 1600 *parts of water.*

Now, there seems to be a great difference of opinion (a professional difficulty, if you please) between the editor of the *Texas Courier-Record of Medicine*—as in this paper above referred to—as well as other medical gentlemen and myself. I plead "not guilty," and submit the case "to the jury."

Now, since I have raised the subject of the hypodermatic use of bimuriate of quinine and urea, I hope to hear the experience of others in the use of this preparation of quinine (with or without the preparations of atropine and morphine), as compared to others in general use the world over. In the use of quinine in any way for any malarial trouble, I have for several years nearly always used morphine and atropine combined with it, for reasons I cannot here well give without making this paper entirely too long.

If I am not very much deceived, this preparation of quinine, to wit, *quinia bimuriatica carbomidata*, is the best yet on record for use in *any way*, and for *any disease*, for which quinine in any form is at all useful, and for reasons apparent to any thinking medical man who is at all familiar with it. I know the great tendency in our profession to to ride medical hobbies, and sometimes without reason or mercy; and I hence have had an eye to this professional weakness, and tried to avoid it in my experience with this particular remedy.

PRACTICAL NOTES ON THE CARE OF THE RECENTLY DELIVERED PUERPERAL WOMAN.

BY EDWARD P. DAVIS, M. D.,

Of Philadelphia.

In the present age of scientific obstetrics it is possible that attention is given so constantly to the great things of the law, that its minor matters are a little neglected; and hence the following notes may prove of interest.

Let us suppose that delivery has been successfully accomplished, and without laceration requiring sutures or *serre-fines*. There remain, then, no conditions requiring especial restraint of the patient, and, supposing the doctor and his helper to have been clean and careful, the dangers of blood-poisoning are at their minimum. Before leaving his patient the doctor must decide upon the amount of interference which he will allow from the patient's attendants, and his own duties regarding the giving of douches, personal inspection of the genitals, the use of napkins, pads, binders, and the many points which his own mind, or the questions of the attendants, will suggest.

As soon after birth as convenient a thorough inspection of the mother should be made; by palpating the uterus through the abdomen, by vaginal touch, and without hesitation, if needed, by sight. It is not advisable to introduce the fingers or thumb into the rectum, for that orifice is not naturally a genital aperture, and any laceration should be appreciated by vaginal touch or inspection after separating the labia. When the uterus has firmly contracted, and hemorrhage has become only a slight serous oozing, and the pulse and general condition of the mother show that nature's equilibrium has been largely attained, the physician should carefully syringe out the vagina to remove any clots which may be present. A tube of considerable calibre, whose curve is that of

the vagina, and whose apertures are punched from without inwards, and are on the sides only, should be used. Such a tube will give no direct, forcible jet liable to enter the os uteri and do violence; the fluid strikes the sides of the vagina, and not the os uteri and cervix directly, and creates a douche current which readily returns; the best material for such tubes is glass. The syringe should be a fountain syringe; its elevation above the patient's bed sufficient to give a current of moderate force only; the tube should not be inserted until full of fluid and empty of air; the fluid used should be sufficient in amount to thoroughly cleanse the vagina, and its temperature high enough to be comfortable to the patient.

The fluid used may be carbolic acid solution 2 per cent.; thymol 1 to 1000; corrosive sublimate 1 to 4000; if none of these are available, boiled water should be taken.

If inspection has revealed a considerable number of fissures in the mucous membrane of the vagina, which cannot be said to be lacerations to be sutured, but which will become ulcers, a convenient dressing for them will be an adhesive antiseptic powder, sprinkled or blown by an insufflator upon the parts. Such powders are iodoform, salicylic acid, sub-iodide of bismuth, bromic acid, and others. One application of such powder fairly will be sufficient in an ordinary case; a simple rubber bulb may be filled with powder and a small glass or wooden tube used as a nozzle; care must be taken, as in the douche, not to inject air. Nature's occlusion dressing is a scab or crust; the powder, clinging to the abraded surface, answers a similar protective purpose, and the writer has often seen puerperal abrasions continue covered until healed in cases where vaginal irrigation had become needful.

The external genitals should be thoroughly washed with tar soap, or castile soap and warm water; douched with the antiseptic fluid used, and dried with clean cotton which has not been touched during labor.

A binder, while not needed by women whose uteri undergo successful involution and whose abdominal muscles are strong, is not injurious. If it causes doctor or nurse to neglect to diagnose a relaxed uterus, by abdominal palpation, it is a decided injury. If the physician has confidence that any cloth placed over the vulva to receive the lochia will be removed and destroyed frequently enough for the safety of the mother, he may order such a bandage or napkin. If the ignorance of obstinacy of the attendants renders this unsafe it will be far better to allow the lochia to escape upon an old, but clean, folded shirt placed beneath the patient's hips: it would probably be more frequently renewed than a napkin. Of antiseptic bandages for the vulva, the following is simple: a strip of cheese cloth or clean old linen, 18 inches long and 12 wide; a layer of borated or salicylated cotton, 1½ inches thick and long enough to cover the vulva, is included in the bandage which is folded longitudinally once, being then 6 inches wide. This bandage is "run across" at the ends and sides with needle and thread, and pinned with four safety-pins to the binder, one pin at each corner: these should be renewed three times daily, and burned after using. Considerable comfort can be given to the patient by the use of pads one yard square, made of cheese cloth enclosing cotton batting 1½ inches thick, the corners tied with cotton yarn: they may be placed beneath the woman in place of draw sheets, when the vulvar bandage is used; they wash well and add to the comfort of the patient.

Shall vaginal injections be given? Not without positive indications. As long as the patient presents no signs and symptoms of an abnormal lying-in condition, she should not be disturbed. The external genitals should be cleansed three times daily, the most scrupulous cleanliness observed in all which pertains to the patient. The child should nurse as soon as the mother has rested and reacted after labor. The nipples should have been carefully washed during pregnancy, to prevent the accumulation and drying of milk; if this simple precaution has been observed the ducts will generally be found pervious. A lotion, tonic and astringent, and free from injurious metals, should be used in bathing the nipples after nursing. To prevent mastitis there are no better means than cleanliness and disinfecting the nipples, and a broad figure-of-eight bandage supporting the breasts and compressing them.

That food most easily borne by the patient, to which the patient is accustomed, and which is craved, is best.

Upon any irritation about the pelvis, before the usual three days have elapsed, after which a laxative is given, an enema of warm soap-suds and castor oil, administered gently, will be of great service.

After-pains should suggest partial relaxation of the uterus, and the presence of clots in the cervix and vagina. Uterine massage through the abdominal walls, and the removal of such clots by the physician, should the pains be severe, are indicated.

The usual minor pains are relieved by warm applications externally or chloral, the uterus extruding the clots. The catheter should be passed, when needed, under the advantage of light, and strict precautions of cleanliness observed before and afterwards. An S-shaped catheter, in which the space between the fenestra and the tip is solid, to prevent the accumulation of pus, is best and most easily disinfected.

These notes do not attempt to deal with the complications of the puerperal state, but with the care of a normal patient immediately after labor. If much attention seems to be given to minutiæ, it is because "an ounce of prevention is worth a pound of cure."

AN EFFECTIVE TREATMENT OF HIP-JOINT DISEASE.

BY B. M. GRIFFITH, M. D.,

Of Springfield, Ills.

Mr. A. A. B., age 32 years, Canadian parentage. About 4 years ago received a severe fall upon the right hip, when alighting from a moving train. To all appearances he soon recovered from the immediate effects of this injury. About two years afterwards his hip joint commenced paining him upon excessive exercise or fatiguing use of the limb, and in the course of another year he complained of pain in the knee joint, especially on the inner aspect of the joint. This was the history of the case when I first saw it in August, 1886. The right limb was apparently three-fourths of an inch longer than its fellow, and the foot slightly everted. He complained of excessive fatigue in the joint on walking, especially if the ground was rough, and if he accidentally stubbed his toe the pain in the joint was quite severe. Upon sneezing or coughing, he would instinctively seize the affected limb in order to lessen the pain caused thereby. No hereditary taint was discovered by examination of the patient's history. The general health was quite good. On manipulating the limb the hip joint was found rather sensitive; inversion was limited. When lying on the back patient was unable to place heel of right foot on the toes of the left; the pelvis was also tipped considerably, and the pain was quite marked when the limbs were fully extended in this position. The pain was lessened by flexing the thigh on the abdomen at an angle of about 20°, and slightly everting the foot, and by so doing placing the pelvis flat on the floor. At no time was pain produced by striking the heel of the foot while the limb was extended. The plan of treatment entered upon was one suggested to the patient by Prof. Gunn, of Chicago, *i. e.*, the application of a plaster of Paris cast to the pelvis, and thereby immobilizing the hip-joint. The cast was applied as far up the body as the xiphoid cartilage, and extended down the affected limb to the knee, making it especially strong in the groin. The cast was applied by having the patient stand on a stool, and the limb somewhat advanced and slightly everted, thereby placing the limb in a comfortable position. The patient was afterwards placed on a canvas cot, and a double inclined plane with a light weight used. In this position he was entirely comfortable, and commenced improving from the start—cod-liver oil and comp. syrup wheat phosphates being the only medication. Patient was kept in the cot for twelve weeks, when the cast was removed. The patient complained terribly of muscular soreness for several days. The limb can now be moved in all directions, flexion and adduction being slightly compromised. No pain in either the knee or hip joints. The movements, while slightly limited, are more powerful than formerly, and are getting stronger. The pelvis is also improved in position. It has been four months since the cast was removed, and neither pain nor any of the old sensations have been felt in the joints.

This case I offer as an illustration of a most effective method of treating hip-joint troubles when seen under such conditions, believing it more efficacious than the use of braces.

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated meeting, April 27, 1887. H. Augustus Wilson, M. D., in the chair.

Dr. Charles H. Burnett read a paper on

Ear Trumpets.

There are three reasons, he said, why the deaf should use ear-trumpets:

1. In order to aid the hearing.
2. To improve the hearing.
3. For the convenience and comfort of those conversing with the very deaf.

1. When a person becomes very deaf in both ears, some resort to an artificial aid of hearing must be made. So long as one ear remains fairly good, patients will not use an

ear-trumpet for the deaf ear. But when ordinary tones near the ears are heard either very imperfectly, or not at all, the sufferer gladly resorts to some form of ear-trumpet. Most of these are unpleasant and imperfect aids, from their disagreeable resonance, and poor conducting powers. They also bruise the meatus, in most cases being made with an ear-piece which fits into the mouth of the auditory canal. These discomforts and imperfections, in the average ear-trumpets of all forms heretofore invented, added to the natural indisposition to employ an ear-trumpet because of its conspicuousness, have in most cases led to an early abandonment, or a partial use at least, of such an instrument.

The cause of ordinary deafness is, in most cases, a catarrhal thickening of the mucous membrane over the ossicles and the inner surface of the membrana tympani, leading to more or less ankylosis in these parts. Passive motion overcomes in them, to a greater or less extent, the immobility induced by this sclerotic process, as it does elsewhere in the osseous and muscular system. The form of passive motion which acts most naturally on the ossicula auditus and their joints, is sound. If, therefore, sound-waves are concentrated in more than usual quantity or vigor upon the stiffened membrana and the ossicles, as by means of an ear-trumpet, hearing is induced, if the auditory nerve is unimpaired. If the latter is impaired, no form of ear-trumpet will be of use.

2. Not only does such a form of passive motion give immediate relief to the deafness in most cases, but such a form of passive motion, acting frequently and systematically upon the ear, prevents further ankylosis in the conductors, and fatty degeneration of the auditory nerve from desuetude. This, of course, tends to a permanent improvement of the hearing, and, in some instances, patients come to hear at last without a trumpet. If such a force were brought to bear early in cases of deafness from ankylosis in the ossicula, the defects in hearing could, in most cases, be arrested, and, to some extent, removed. This form of aid to hearing has its happiest results in very deaf children, in whom the loss of hearing often entails loss of speech, if they have already learned it. If they have not learned to talk, and their deafness depends on catarrhal disease in the middle ear, and not on a lesion of the acoustic nerve, the use of a good ear-trumpet will rescue them from entire deaf-dumbness.

3. The convenience and comfort of those who communicate with the deaf by means of a trumpet are not the prime, though important considerations. For, if this mode of conversation is rendered difficult by reason of the imperfect ear-trumpet at command, it will not be readily or willingly employed, and, in the case of children, therefore, not enough will be said to them to improve their hearing or to teach them speech.

The most useful ear-trumpets yet presented to his notice are those of Mr. Maloney, who exhibits them here to-night. They are not only useful as conductors of sound, succeeding where other forms fail, but they do not fit into the meatus. They are held to the ear, the aural end of the instrument being supplied with a disk, and not a tip for the meatus. This does away with bruising the canal, or exciting furuncles in it, so common in the employment of the form heretofore in use. They have been devised in a scientific manner, and introduced to the profession on their own merits. The best results, or the most signal ones, have been obtained by the so-called silent instrument. This is simply because it is the most powerful, and hence renders most aid to the very deaf, the only people who are really willing to use any instrument. The smaller instruments are just as good for those not very deaf, and, if used by such patients, would aid in the retention of hearing, and tend to cure their hardness of hearing, as he has shown. But the less afflicted class seem unwilling to use any form of ear-trumpet. All ear-trumpets of any value must possess some size in order to contain a column of air sufficient to impress the drum. They must be larger than the auricle with which the patient is already supplied. Hence, all invisible appliances, so called, are self-evidently good for nothing.

Mr. J. A. Maloney, of Washington, said that he commenced his labors in "Aural Mechanics" with a mode of procedure as follows:

1st. To develop instruments as far as he could to meet the various phases of defective audition.

2d. To construct the instruments to give satisfactory results without entering the auditory canal.

3d. To use artificial drums or membranes to guard against impact of air upon the "membrana tympani," and prevent reverberation, so common in all the old forms of instruments. He decided that a scientific instrument should possess these three essential qualities: it should be large enough to be of practical value; it should augment sounds; but with such augmentation the "timbre" or quality of sound should be preserved.

We are all aware that the membrana tympani, unlike other stretched membranes, responds to all vibratory motions within a certain limit, whether they are in the form of noise or of composite tones, transmitting through the intermediate agencies of the middle and inner ear, to the nerve of hearing, auditory sensations, Could a stretched membrane be arranged, so closely imitating in function the one given to man as to show how beautiful are the harmonies of nature?

After experimenting twelve months, he adopted the form of membrane which he presented. The reason for its adoption came about in this way. In the early stage of his experiments he invariably found a lack of clearness of tone, until one day the thought occurred to him that he could secure uniformity of tension by clamping the membrane between two rings. When this was done he found it a great improvement over all other methods, and consequently adopted it after thorough tests. Even after obtaining good results, he could not but feel that there must be some other result produced by the rings than that of maintaining a uniform tension of the membrane. He found that while the membrane was upon the stretcher-frame, with the rings glued upon each side of the membrane, like any other membrane, it would be thrown into sympathetic vibrations by tones corresponding to its fundamental; *but that when cut from the frame*, and dependent for its tension upon the two rings alone, it would not respond to a tone corresponding to its fundamental. Now it has been thought that the last named feature exhibited by the membrana tympani was produced by its union with the auditory ossicles. But may it not be due to two facts? 1. That the margin is thickened. 2. That the middle layer, or "substantia propria," is fixed to a ring of bone.

His membrane describes a central vertical line between the two rings acting as clamps, and the rings themselves represent the ring of bone to which the middle layer, or "substantia propria," of the membrana tympani is attached. In the construction of the instrument, the fact must be borne in mind that it must be arranged to suit and compensate for the defect of hearing. 1. Arrange for high tones, if the defect is in that direction; or for low tones, if the defect is in that direction. 2. The augmentation and clearness must be to the extent that the person will hear every word spoken, instead of a word here and there, as heretofore, which involves a severe mental strain to construct the incomplete sentences.

Dr. S. S. Cohen said he had the pleasure of seeing some time ago a demonstration of these instruments in the case of some patients of Dr. J. Solis Cohen, and they acted very satisfactorily. A letter was received some time ago from Dr. Lacharriere, of Paris, the eminent physician in charge of the National Institution for Deaf-Mutes, inquiring as to the truth of reports that in certain institutions in this country, especially in New York, ear-trumpets were being used in the instruction of so-called deaf-mutes, and that it had been found that a gratifying proportion of children thought to be totally deaf, reacquired in this way a certain degree of hearing power. After some correspondence, he learned that Mr. Currier, Professor of Articulation in the Deaf-mute Institution at Washington Heights, New York, had used an instrument different in construction from that of Mr. Maloney, with good results. He published accounts of them in the *Annals of the Deaf and Dumb* for January and for October, 1885. He reports a number of cases that have acquired the power to carry on conversation. Mr. Currier uses what is termed the "conical conversation tube," attaching two mouthpieces and tubes to a single earpiece, in order that a patient may hear his own voice as well as that of the instructor. His system of instruction to reawaken so-called "latent hearing" is ingenious, and from his reported cases, apparently quite successful. If Mr. Maloney's earpiece were attached to Mr. Currier's double tube, it might be found still better.

Dr. C. Wirgmann asked if there were any liability for the rubber disk to get out of order.

Mr. Maloney said with reference to the durability of the rubber, that it was a protective coating. During the past nine months he exposed them to varying changes of temperature without any apparent effect. If the membrane should get out of order it can easily be replaced. He had never had his attention called to the instrument of Mr. Currier until the matter was mentioned by Dr. Cohen this evening. He finds that his instrument is open at both ends. In speaking of what he terms No. 3, or "silent," instrument, he neglected to state that it is closed at the end nearest the ear. The object of this is to prevent the impact of the air on the drum of the ear. Such impact has a tendency to destroy the clearness of the tone. With his instrument, the only impact on the "membrana tympani" is that of the column of air in the auditory canal between the membrane of the instrument and

the drum of the ear, thereby developing *true auditory sensations* which cannot be produced by instruments open at both ends.

While he has done something in the way of testing those supposed to be entirely deaf, he is not prepared, without his notes, to speak on this subject, because he has not yet finished the line of tests marked out. He can say, however, that he has made tests in two cases supposed to be totally deaf and dumb. One was a man, forty-two years of age, and deaf from childhood. He made him hear on both sides *noise only*, for the percipient functions had never (as in such cases) been trained or educated. The other was a boy, eleven years of age, supposed to hear very slightly on one side only. Upon making tests he found he could hear on both sides, *noise only*, for the same reason as mentioned in the foregoing case. When he completes the line of tests marked out he will be glad to present the results to the Society.

Dr. C. H. Burnett said that the question of so-called latent hearing in deaf-mutes is, of course, very important. In one sense, there is no such thing as latent hearing. Without doubt, many deaf children lose the power of talking if they have previously acquired it, or fail to learn to speak on account of their inability to hear. In the case of a graduate of two deaf-mute colleges, the man's wife discovered that he could hear to a certain extent, and by systematically talking to him, he acquired the power of hearing an ordinary tone of voice while in an adjoining room. This case was reported to him by Mr. Graham Bell, of Washington. In most cases, deafness in due to ankylosis, and the use of an ear-trumpet is simply another application of the movement cure.

He has himself seen a child a little over two years of age, just learning to talk, lose its hearing to a marked degree. By persistent teaching on the part of the mother the hearing was much improved, and the child was rescued from a condition of deaf-dumbness. The child is now twelve or thirteen years old, and while the hearing is not perfect, she is far from being a deaf-mute. Many deaf mutes can hear something. It is very onerous for even a parent to exercise the hearing by the unaided voice, but with an instrument like those of Mr. Maloney's, the parent may be induced to undertake the task.

NEW YORK ACADEMY OF MEDICINE.

Regular meeting, April 7, 1887.

A. Jacobi, M. D., President, in the chair.

On the Proper Selection of Ether or Chloroform as an Anæsthetic.

Dr. A. G. Gerster read a paper with this title, in which he said both chloroform and ether are dangerous, but in general chloroform is the more so. It is the more powerful agent, and should be administered cautiously, and in properly selected cases. But this is not sufficient ground for its unqualified condemnation. Consciousness being restored there is no secondary danger from chloroform. This can not be said of ether, for numerous cases of nephritis and pneumonia have followed its use. The contraindications to ether, in his opinion, were Bright's disease and bronchitis. In certain operations its effects were unsatisfactory, as in herniotomy and operations involving the peritoneum and deep tumors in the vicinity of large vessels. Certain patients, especially those addicted to the use of alcohol, sometimes only in a moderate degree, took ether badly, and were unduly affected by collections of mucus in the bronchi. Some patients could not be satisfactorily anæsthetized by ether, and here, chloroform being substituted, complete anæsthesia followed. Ether should not be given in the large quantities and careless manner so frequently seen. He employed Ormsby's inhaler, which he regarded as the best; a minimum of ether being required, the patient could be quickly restored.

Cases were cited in which nephritis or pneumonia had followed the use of ether, in some the result being fatal.

The only contraindication to the use of chloroform was a weak heart from whatever cause. Patients who feared the operation, or who were nervously depressed, were more likely to be badly affected by chloroform. A weak heart also rendered ether more dangerous, but chloroform was more so.

Dr. H. Knapp sent a letter, giving the result of his experience with ether and chloroform. Prior to 1874 he had employed chloroform in over three thousand cases. There was no fatal result, but in many unpleasant effects. He had seen fatal results in Berlin and Vienna, and was in constant dread. Since 1874 he had used ether in all classes of cases, administering it according to the so-called choking plan. In a few he had to interrupt the narcosis temporarily. The secondary effects had not been worse than from chloroform. He thought it was safer than chloroform, and as manageable or more so.

Dr. R. F. Weir thought the presence of kidney disease should make us more cautious in the use of ether, but he would not substi-

tute for it chloroform. The pneumonia following ether was due often to exposure of the patient, especially in applying wet cloths, formerly by the spray, etc. He knew of only four deaths from ether in the New York Hospital.

Dr. L. A. Sayre used chloroform. He preferred it because it is more agreeable; it is more speedy in its effects; it does not produce spasmodic muscular contraction; it is not followed by bad after effects—as vomiting, trouble with the respiratory organs and kidneys, etc. To give ether or chloroform freely mixed with air, requiring large quantities, and 'causing the patient to struggle, was wrong. He gave chloroform by his inhaler, requiring only twenty or thirty drops to produce anæsthesia after a few inhalations. Administered in this way, should the heart cease to act it could be restored by a few artificial respirations. This was not the case when a large quantity had been inhaled by the ordinary method of administering it.

Dr. W. Gill Wylie had within the past two months had two deaths from ether, one from Bright's disease caused by it, the other from suffocation an hour after herniotomy. He had never before had any difficulty. He knew of another death from it near where he performed his operation with the fatal result from the ether. Generally ether was safer than chloroform. But chloroform was employed in the lying-in chamber and in children; he would also give it in many cases of lung and kidney troubles.

Dr. Wyeth, Dr. Abbe, and Dr. Thallon agreed with Dr. Weir that the presence of kidney disease should render us more cautious in the use of ether, but it should not necessarily contraindicate its use. Dr. Mundé considered ether the safer anæsthetic, but both it and chloroform were dangerous, and should be administered by skilled hands in a cautious way. Dr. Amidon would precede the administration of ether by atropia or a preparation of belladonna, to lessen bronchial secretion.

Editorial Department.

Periscope.

How Bright's Disease Comes About.

In a paper thus entitled in the *Medical Register*, Dr. J. Milner Fothergill writes as follows:

The hard, keen brain-toiler is liable to derange his viscera, and his liver reverts to the uric acid formation, as years roll on. Not only that, but he begets children with congenitally insufficient livers, *the innate weakness of Murchison*. In some cases urates are seen in childhood, and vesical calculus is not infrequent in babies. More commonly, however, it begins to show itself after puberty. A lady of this type will present the following characteristics and symptoms: She is a bright, sensitive, high-spirited, and usually high-souled, unselfish creature; light in the bone, commonly petite, muscles not large, but firm, and when she shakes hands her grip is that of decision, as are the tones of her voice; her features are regular and mobile, often small; her susceptibilities are keen, and so are her special senses. She is capable of great devotion, and in her earnestness is usually self-forgetful; she is emotional, but not demonstrative, and is a distinct neurotic. As to her complaint, she has indigestion accompanied by acidity and flatulence, often alternating; commonly some constipation; she is liable to attacks of hemicrania, or migraine, or "face-ache," as she calls it, usually unilateral and on the right side, accompanied by sparks or "dazzles," often ending in vomiting; and these migrainous attacks are accompanied by great vesical irritability, and constant call to make water; she has fits of palpitation, and at other times failure of the heart's action, differing from syncope in that there is no loss of consciousness, and she feels unutterable sensations, of which the expression of the eye mutely tells. She constantly has sediments in her water, though a small eater, and especially avoiding animal food. She has an insufficient liver, which Dame Nature protects by a small, fastidious appetite, and a dainty palate, despite which it reverts to the uric acid formation. She is a typical instance of the adage, "The sword will wear out the scabbard." She has no mercy upon her body, and her complaint is that it is very hard that she cannot do as others do. If she goes to the theatre or concert, she so thoroughly enjoys it all that probably she is in bed next day with migraine. Her old nurse speaks of her as "all up and down"—either volatile and gay, or irritable and depressed. Somatically these neurotics of the Arab type are the greyhounds of the human

race—light, active, and nimble; but psychically greatly superior to these canine representatives.

She is to be found everywhere, but most markedly in towns. She is a charming patient; but rarely yields flattering results of treatment. She is acute, and capable of taking care of any one but herself. She is in my experience commonly an American lady; and in most instances tells of the energetic, long-sustained, and usually successful efforts of her father. "The fathers have eaten sour grapes, and the children's teeth are set on edge." Her father carried on severe mental toil at the expense of his viscera; his daughter comes into the world framed on his pattern. In both we find reversion to the uric acid formation, and, of course, with that the whole consequences thereof.

And one of the direct outcomes of uric acid in excess in the blood is interstitial nephritis, commonly termed "Chronic Bright's Disease."

Removal of Broken India Rubber Catheter From the Urethra.

John Small, L.R.C.S., of Geelong, writes as follows to the *Australian Medical Journal* of March 15, 1887:

At 1 a. m. on November 10, 1886, I was called to a case of retention of urine in a man of sixty years. Thirty ounces of urine were withdrawn through a silver catheter (No. 12), without difficulty.

Next day some more urine was drawn off, and a pure rubber soft catheter (Jacques' No. 9) was given to the patient, with instructions to use it regularly every eight hours.

On the night of the 28th November, I found him waiting in my consulting room, in considerable pain, and he gave the following account: At 9 a. m. that day, he had passed the catheter as usual, and had withdrawn an average quantity of clear urine, the bladder he noticed beginning to contract well. At 6 p. m. he tried to pass the catheter again, but found some obstruction, which he attempted to overcome by forcing the instrument onwards, but when it had disappeared into the urethra (without any urine passing through) he began to be alarmed, and tried to withdraw the catheter, and failing, pulled more strongly, with the result of leaving a large portion of the instrument in the urethra, only five or six inches coming away. He now said that he felt it was in his bladder.

Using a No. 6 silver catheter as a probe, I could feel the missing part, a little in front of the triangular ligament, and by exerting deep pressure into the perinæum, a well defined lump could be recognized.

Treatment.—After placing the patient in the erect position resting against a table, and warning him to cry out immediately he felt any pain, I proceeded with a pair of œsophageal forceps (curved something like a prostatic catheter, and opening vertically) to try and extract. After several failures, the forceps kept their grip, and the catheter was drawn several inches forward. The forceps then slipped, and with no other forceps could I get it further than one inch from the meatus. There was now some hæmorrhage. After carefully manipulating through the skin, I decided that the catheter was firmly doubled on itself, forming too large a mass, plus forceps, to pass through the canal. After waiting a few seconds, I passed a properly bent probe into the urethra, and by careful manipulation, causing a little pain, got it through. Extraction was then easy. The patient was then relieved by having his urine drawn off through a No. 6 soft catheter, and he then insisted upon walking home.

Nomenclature of Pathogenic Micro-Organisms, According to the Accepted Recent Definitions of Dr. J. Schroeter.

Micrococcus vaccinæ (Cohn), the active portion of vaccine lymph; micrococcus decalvans (Cohn), produces baldness; streptococcus erysipelatis (Koch), induces erysipelas; streptococcus diptheriticus, active in diphtheria; hyalococcus pneumoniæ, present in croupous pneumonia; hyalococcus Beinzii, causes the gregarina of hair; bacillus anthracis (Cohn), produces anthrax; bacillus tuberculosis (Koch), in phthisis; bacillus lepræ (Hansen), in leprosy; bacillus syphilitidis (Lustgarten), in syphilis; bacillus typhis (Eberth), in typhoid fever; microspora comma (Koch), induces Asiatic cholera; microspora Finkleri (Koch), present in cholera nostras; cladothrix Fœrsteri (Cohn), found in disease of the lachrymal ducts.

Biniodide of Mercury.

The great drawback of the employment of the biniodide of mercury as an external application consists in its insolubility. M. Méhn, Member of the Academy of Medicine in the Pharmaceutical Section, has overcome this difficulty by recommending the salt to be rubbed up with castor oil,

which completely dissolves it. A solution of one part of the salt to fifty parts of castor oil does not become cloudy. This solution is sufficient to satisfy the exigencies of therapeutics. The addition of iodide of potassium increases the solubility of the biniodide of mercury in castor oil.—*Paris Correspondent of the American Practitioner and News.*

Antifebrin.

J. K. Murray, M. B., presents the following cases showing the advantage of antifebrin over other antipyretics in the *Lancet* of April 23, 1887:

Case 1. J. B., aged 3; meningitis, with a temperature ranging from 102° to 105.4° F. Three-grain doses were at first tried in the forenoon. The temperature fell from 105° to 101.4° during the first two days, but on the third evening 104.4° was registered. Five grains were then given every three hours, and the temperature fell to 99.4° after two doses, and remained thereabouts. When two doses were omitted the temperature rose again.

Case 2. A. V., aged 2; broncho-pneumonia, with temperature from 103° to 105° F. At first three-grain doses were given every three hours, and for four days this kept the temperature below 100°. On the fifth day the temperature rose repeatedly above 102°, so five grains were given every three hours, and the temperature fell to 99.4°, and remained at that point.

Case 3. M. L., aged 25; pyelo-nephritis. Fifteen-grain doses were used. The temperature fell to 99° within one hour and a half, and remained there for ten or twelve hours. I had the temperature taken every three hours, and whenever 101° was registered, fifteen-grains were given. Quinine in ten-grain doses was tried under the same conditions. The temperature fell about 2.4°, but rose to 104°, and sometimes 104.8°, within six or seven hours.

Remarks.—Antifebrin seems much more powerful than quinine, kairin, or antipyrin. It equals antipyrin in the duration of its effects, and in this respect surpasses quinine or kairin. It is only excelled in the quickness of its action by the external application of cold. Its effects are evident within an hour, and they last from ten to twelve hours when a full dose has been administered. When administered for a long time, the dose must be increased. It produces profuse sweating and redness of the cheeks; it diminishes the pulse-rate, and distinctly increases arterial tension. I found no depressing effects follow its administration even when full doses were given. Antipyretics belong to two great classes, namely, those which diminish tissue metabolism; and, secondly, those which increase the loss of heat. From the sweating it produces and the rise in arterial tension, one might conclude that antifebrin belongs to the second classas well as to the first one. This might explain the quickness of its action, as antipyretics of the second class act more speedily than those which diminish tissue metabolism.

A Case of Hermaphroditism Unrecognized for Sixty-Nine Years.

Last year, a man aged 69 died after the reduction of a "labial" hernia in the Charité Hospital, Paris. At the necropsy it was found that "this individual, a woman for sixty-nine years, was a man." He had always believed himself to be a woman, and had dressed and lived as such. There was, however, a history of masculine sexual propensities, and he liked to do heavy manual work, which his powerful, muscular frame enabled him to perform. He was often morose and suspicious. He was never married. Messrs. Pozzi and Grattery describe his case in the *Progrès Médical*, of April 16. There was hair on the chin and lips, indeed the patient shaved regularly, but none on the cheek, chest, extremities, or along the line between the umbilicus and pubes. There were labia, which did not go so far back as in the female. The right labium majus contained the right testicle and a hernial sac. The labium minora formed the prepuce and the frænum of the glans penis, which was large, bifid below, and provided with a corona; the corpus cavernosum was single, and attached to the deep perineal fascia, and not to the pubic arch. The groove which ran along the under surface of the bifid glans was continued along the vestibule to the orifice of the meatus urinarius; the groove bore crypts like those which are found in the male urethra. There was a vulvar pouch one inch and a half deep, the perineal raphé was not quite four-fifths of an inch long. Below the bladder, a fleshy mass received the vasa deferentia in a hollow on its surface. This mass, the uterus masculinus, was hollowed by the vulvar pouch below. The vasa ran through the uterine wall, and beyond it were dilated and irregular for some distance. The left was joined the undescended left testicle, and was pervious. The right did not reach its testicle, but ended as an impervious

cord in the wall of the hernial sac in the labium. The left kidney was atrophied, and contained a calculus. This case was an instance of transverse hermaphroditism, the outer parts being of a female, the inner of male type. The presence of labia and of a vulvar orifice naturally gave rise to the belief that the subject was a woman.

The Management of Post-Partum Hemorrhage.

Dr. Schomberg, of the Lying-in Institution in Christiania, writing on post-partum hemorrhage, states that the number of cases in which this occurred to a serious extent during the years 1876–1884 was 54 out of a total of 2533 labors—*i. e.*, about 2 per cent. of all cases. He appears to have but little faith in ergot for immediate arrest of violent hemorrhage, either administered internally or as ergotine injections. In the case of women subject to hemorrhage, he advises a course of tonic strengthening treatment during pregnancy. When hemorrhage occurs the coagula must be expelled by external manipulation, and then he finds that the most advantageous plan of immediately arresting the flow is to close the os uteri by compression. He refers to Hamilton's paper in the *Edinburgh Medical Journal* for 1850, and to Fasbender's similar plans described in 1869, without apparently any knowledge of Hamilton's previous work. The Norwegian surgeon introduces the fingers of one hand into the vagina, the tips reaching to the anterior fornix, and pressing the anterior lip of the os backwards. The other hand grasps the uterus externally, anteflecting it while the fingers compress it from behind against the fingers of the other hand, the os being thus mechanically closed. Dr. Schomberg is inclined now to prefer cold to hot injections, notwithstanding the great estimation in which the latter are beginning to be held. He warns obstetricians not to administer irritants too freely, as they set up nausea, and this adds to the condition of collapse. He has, however, latterly been in the habit of giving teaspoonful doses of a concentrated solution of common salt with excellent results.

Treatment of Catarrhal Jaundice.

Dr. Gluzinski, writing in a Polish journal, states that in cases of catarrhal jaundice he has found excellent results follow the treatment recommended by Krull, viz., the repeated injection into the bowel of large quantities of cold water. This increases the peristaltic action of the intestines, and removes any mechanical obstacle to the flow of bile. Again, as has been shown by Röhrig and Mosler, who injected large quantities of cold water in dogs, the bile is thus rendered both more liquid and more abundant, so that it more easily overcomes any obstruction. At first water at 59° F., is injected into the bowel until the patient complains of a feeling of distension in the abdomen. He is then made to retain it as long as possible. Most patients manage to retain two litres for from a quarter to half an hour. The next day the enema is repeated, but with water about 4° higher. The temperature is again raised on each succeeding day, but when 72° have been reached no further increase is made. The reason of the increase is that the repeated introduction of cold water is apt to irritate the mucous membrane of the bowel. Altogether four or five enemata are sufficient to produce the desired effect. The increase of the biliary secretion may be judged of by the color of the fæces. Of course, the diet is attended to in order to prevent a recurrence of the affection.

Action of Drugs on Gastric Movements.

Some excellent researches are still in process of conduction by Schütz, on the action of some medicaments on the movements of the stomach. Emetine, tartar emetic, apomorphine, strychnine, in a less degree caffeine, veratrine, chloride of barium, nicotine, and pilocarpine in small doses, act as direct excitants of movements of the stomach, which become spontaneous and of abnormal character. Muscarine directly stimulates the terminal ramifications of nerves in causing generalized contractions of the stomach. Physostigmine, digitaline, scillitine, and helleborine produce an increase in the excitability of the muscular coats in such a fashion that the stomach at a given time is agitated by generalized and prolonged contraction. Actual paralysis of the auto-motor centres has not been observed, but chloral, urethane, morphine, pyrophosphate of zinc, arsenic, as well as nicotine and pilocarpine, in large doses, have caused weakness of the gastric contractions. Paralysis of the terminal branches of the nerves has only been obtained by atropine. Ether and chloroform suppress the excitability of all the innervation apparatus, but only during the time when the stomach is exposed to the direct action of the vapors. During anæsthetic sleep the gastric movements are not influenced.

THE

Medical and Surgical Reporter.

A WEEKLY JOURNAL,

ISSUED EVERY SATURDAY.

N. A. RANDOLPH, M. D.,
C. W. DULLES, M. D., } EDITORS.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year, $5.00
Quarterly Compendium of Med. Science, - 3.50
Reporter and Compendium, - - - 6.00
Physician's Daily Pocket Record, - - 1.50
Reporter and Pocket Record, - - - 6.25
Reporter, Compendium and Pocket Record, 7.00

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

RANDOLPH & DULLES,
N. E. Cor. 13th and Walnut Streets,
P. O. Box 843. Philadelphia, Pa.

THE MEDICAL AND SURGICAL REPORTER.

During its twenty-four consecutive years of existence there has been in action a broad and liberal policy governing the conduct of this journal. Those controlling it have fully recognized the value of theory and experiment, and have always presented the latest laboratory bulletins. They have, however, also recognized that the practical test is the crucial test, and have given chief prominence to terse reports of bedside experience. A shrewd, careful and practical observation of cause and effect in the treatment of disease, carries on its face the passport of admission to these columns, no matter whence its source; while on the other hand, the highest professorial title gives no entrance to the REPORTER, if the matter appended have not actual worth.

This journal has maintained an independent attitude on all questions relating to the welfare of the regular medical profession in America. It is the organ of no college, clique or section, and it is the representative of no commercial interest.

These are the attributes which have made the REPORTER a weekly visitor in every town in the Union, and the policy which is here outlined will be vigorously pursued under the present editorial management.

PEPSIN IN THE TREATMENT OF CHRONIC TROPICAL DIARRHŒA.

In a recent number of the *Indian Medical Gazette*, Mr. George Harrison Young reports three cases of chronic diarrhœa which had proved rebellious to the ordinary methods of treatment. In each of these cases the treatment was stopped, and the patient placed on a milk diet, a half-pint being taken every three hours, and 5 grains of pepsin given four times daily. The record of his cases appears to show that great benefit was derived from the use of pepsin. Mr. Young states that he has now used pepsin in a considerable number of cases, and always with success. He claims that this mode of treatment is especially applicable to that form of diarrhœa in which the motions are large and frothy. These cases are due to insufficient digestion and secondary fermentation of the food. When this form of disease becomes established astringents are useless and often even

injurious. Pepsin at once checks the diarrhœa. Only milk diet should be allowed, and the pepsin may be given with the milk. In typhoid fever, the author claims that pepsin, by increasing digestion and assimilation of food, will thereby lessen the diarrhœa and intestinal irritation, and by so doing will diminish the severity of the disease. It is also useful in dysentery occurring in debilitated subjects.

Notes and Comments.

Disinfectants and Their Uses.

Dr. Alfred Carpenter delivered an address at the last monthly meeting of the Association of Public Sanitary Inspectors, on "Theory and Practice as to Disinfection." He urged that sanitary inspectors, who have very great power if they use it carefully, should reason out the grounds of the application of any particular mode of disinfection, rather than give a blind obedience to written orders. With regard to small-pox, he pointed out that germs of living protoplasm in the breath of a patient will take root if immediately transplanted to the membrane of a susceptible person, but if floated about in the air for 100 yards they will lose their vitality. Isolation, with ventilation, as rapidly as possible, is necessary in such cases. For disinfecting the furniture of a house after infectious disease steam is preferable, and he advised all local authorities to provide themselves with the means of applying steam heat. Dr. Carpenter did not recommend carbolic acid as a disinfectant in cases of disease, for it has been found that the acid preserves the dormant germ from decay. This also hold goods of alcohol; the use of spirituous liquors as a protection against the evils of impure water is no protection at all. The same argument applies, though in a minor degree, to sulphurous acid. The best disinfectant is a solution of bichloride of mercury. It requires to be used with care, but it is rapid in its action, and so powerful that a solution of 1 part in 5000 of water will in fifteen minutes destroy every living germ, dormant or otherwise, with which it comes in contact. The best disinfectant for sewers is sulphate of iron. Dr. Carpenter concluded by saying that the lines on which disinfection should be carried out are: Ventilation, aërial disinfection by chlorine or steam, lime washing, washing floors and furniture with solutions of mercuric chloride; steam heat for clothing, furniture, etc.; and sulphate of iron or chloride of lime in adequate quantities for flushing. If these means are effectively applied, infectious diseases will be completely banished from our midst, and any local authority which now allows of their continuance is doing defective work.

Adhesive Plaster.

Dr. Addinell Hewson recently gave a description of a method of preparing adhesive plaster: Bookbinders' paste, which in its pure and clean state is simply a wheaten flour paste, made in a porcelain crock by boiling thoroughly one part of flour in three or four parts of cleanly filtered water, always for twenty minutes, stirring the mixture all that time by a clean, new wooden or bone spatula, is applied by a thin strip of wood directly to the bare, clean integumentary surface of one of the edges which are to be secured, and then one end of a strip of gauze is to be laid on it and rubbed gently and smoothly so that the paste will come through its meshes. It should be applied no nearer the edge of the wound than collodion would be. It dries as quickly as the latter, and has, indeed, the advantage of always drying fast, even on a moist or dampened surface—a property wanting in liquid glass as well as glue, even where expedients have been previously used to dry the parts. When the end of the strip first applied is fixed by the paste, some of the latter is to be put on the other side of the wound, and the gauze strip drawn smoothly across it and pressed on that side, the surgeon watching the contact of the lips as to how well it is secured, rectifying by a probe any irregularity to be seen through the meshes. Sometimes in a long wound it may be advisable to secure the initial extremities of the gauze strips alternately on both sides. On other occasions it may be better to fix them on one side and draw all by their free extremities across, and so get equal amount of traction and tension in that way. The paste, when made strictly according to the directions given, and kept covered in dry place, will not sour, and such paste can be made the vehicle of various kinds of antiseptics and disinfectants. By the addition of a small quantity of corrosive sublimate (one grain to a pint) immediately after it is fully boiled, it effectually prevents the germination and development of various kinds of microbes wherever it may be applied.—*The Polyclinic.*

Absorbent Canton Flannel.

England, in describing antiseptic dressings which he prepares for use in the Philadel-

phia Hospital, describes as follows his preparation of canton flannel:

Under this term we use in the Philadelphia Hospital a canton flannel rendered absorbent by boiling in a 3 per cent. solution of caustic soda for an hour and a half or two hours, until all the fatty matter in the fibres is decomposed, then washing in several portions of cold water, then macerating the product for ten or fifteen minutes in a 1.5 per cent. solution of hydrochloric acid, whereby any traces of free soda are neutralized, and the fibres of the goods are whitened; and, lastly, followed by several washings in water, wringing out with a machine and drying. This product has been found to be peculiarly serviceable in hospital practice as a cheap, efficient and reliable substitute for all the minor cases for which at present the so-called patent lint is generally demanded; for example, in local applications of lotion of lead-water and laudanum, and as a dressing with various ointments upon chronic sores, ulcers, etc. The proof of its utility may be inferred from the fact that while we used, during 1886, 1500 yards of patent lint, we used also 2500 yards of this absorbent canton flannel. In cost it is almost one-half of that of patent lint.—*American Journal of Pharmacy, Aprit* 1887.

Hydriodate of Hyoscine in Kidney Diseases.

Dr. Tirard, in the *Practitioner*, reports his experience with the following solution:

℞.	Hyoscine hydriodatis,	gr. j.
	Aquæ destillatæ,	℥cc.

Hydriodate of hyoscine is a drug which can be used with perfect safety in cases of kidney disease where morphine is inadmissible. It is a drug which may give rest when other sedatives fail.

If used in two-minim doses subcutaneously, it may give more satisfaction to the patient than to the attendants, since the unconsciousness may be accompanied by angry and combative delirium; should this occur, it will probably be sufficient to diminish the amount employed.

It is very rapid in its action, unconsciousness following in from ten to twenty minutes, and the after-effects are of a soothing character.

Even when delirium is present in a violent form, it is followed by quiet sleep, and the patient being unconscious, is much more refreshed than by a night of short snatches of sleep produced by chloral or bromide, and the result is a marked improvement in both aspect and temper. And lastly, no irritation is produced around the site of injection.

I believe that hydriodate of hyoscine will probably take a firmly-established position as a sedative in cases where morphine cannot be employed.

A Case of Aneurism of the Thoracic Aorta Treated by Galvano-Puncture.

The aneurism was of the first part of the arch of the aorta. The symptoms for a long time were those of insufficiency of the aortic valves, with hypertrophy of the left ventricle. Horribly painful attacks of angina also occurred from time to time, and for these morphia was given hypodermically. After some months the patient was again seen, and a tumor was noticed over the second left costal cartilage, and dysphagia had appeared. The patient being urgent that some operation should be performed which might possibly give him relief, Obelar determined to try galvano-puncture. A Spamer battery of 20 cells was used. The needles were inserted about one inch apart. The current was gradually increased from 2 to 10 cells, and then gradually lowered to 2 again. The séance lasted 10 minutes. In three other séances the number of cells was increased to 20. The patient complained of burning pains in the sac and in the left chest for some hours after each operation. The tumor diminished much in volume, became harder and pulsated less; the dysphagia also was relieved and the general condition improved; the pains, however, continued. After the lapse of a month the tumor again began to enlarge and the pulsations became more evident.

A Device to Secure Fixation of Fragments in Compound Fractures.

Dr. Molloy describes the following method, as seen in Schede's wards at Hamburg:

The treatment of compound fractures presents some novel features. The wound or wounds are laid freely open, irrigated thoroughly with corrosive sublimate solution, 1:1000, all loose splinters of bone removed, fractures reduced, and fixation of the fragments secured by means of a little device of Dr. Hansmann, the first assistant surgeon. It consists of a small metal plate about half an inch wide and as long as is necessary, perforated with holes at short distances. It is laid upon the periosteum, and a screw inserted through one of the holes into the bone on each side of the point of fracture. Two of these little splints are usually em-

ployed in a fracture of a large bone, after which the immobility of the limb is secured in the usual way by splints; the wound being left open and treated antiseptically. The metal plate has the advantage over bone sutures in being much more easy and simple in its application as well as removal, and it secures and maintains the approximation and fixation of the fragments just as firmly.—*Lancet-Clinic*, April 16, 1887.

Olfactory Acuteness.

Nicholls and Bailey (*Medical Press*) have recently published the results of experiments upon the relative acuteness of the sense of smell in individuals. A series of solutions of oil of cloves, nitrite of amyl, extract of garlic, bromine, and prussic acid, were prepared by successive dilutions with water until the limit of perception was reached, and then the solutions were placed indiscriminately and submitted to a number of persons of both sexes to classify them properly by the sense of smell. The results showed that on the average the sense of smell was much more delicate in the males tested than in the females; but the degrees of keenness ranged widely as between individuals. Thus three male observers were able to detect one part of prussic acid in 2,000,000 parts of water, though its presence was not revealed by a chemical test; but others, of both sexes, could not detect prussic acid in solutions of almost overpowering strength. The following figures give the average limit of delicacy of perception: Cloves—Males, 1 in 88,128; females, 1 in 50,667. Nitrite of amyl—Males, 1 in 783,870; females, 1 in 311,330. Extract of garlic—Males, 1 in 57,927; females, 1 in 43,900. Bromine—Males, 1 in 49,254; females, 1 in 16,244. Prussic acid—Males, 1 in 112,000; females, 1 in 18,000.

Stricture of the Female Urethra.

In a paper read before the Obstetrical Society Dr. Herman stated that he had measured the female urethra in fifty-five cases where no urinary trouble was complained of. He found that in the majority No. 17 catheter would pass, and in all but two, No. 14. He related six cases of stricture under his own care, and had collected and arranged in tabular form twenty-three others, which were all he had been able to find reported. The chief cause of urethral stricture in young and middle-aged persons of both sexes was gonorrhœa. In both sexes, also, it might be caused by injury—such cases being proportionately commoner in women on account of child-bearing—or by the cicatrization of chancres. Stricture was also sometimes due to growths of so-called lupus of the vulva, and, in old women, to general fibrous thickening and induration of the urethra, without any history of gonorrhœa or other discernible local cause. As regards treatment, Dr. Herman had found rapid dilatation so simple and successful that he preferred it to any other method.

Sawdust as a Material for Surgical Dressings.

Escher, of Trieste, reports his results with the use of sawdust as a surgical dressing during a year and a half. The material was prepared with corrosive sublimate after Morosoni's method, and was very cheap and efficient. It was found that it could not be made to lie evenly in bags without forming lumps which were painful to the patients. A loose lint called "wood-wool," made from macerated wood fibres, was accordingly incorporated with the sawdust, and furnished a good dressing. In many cases the sawdust was mixed with alcohol and liquid pitch, and gauze was impregnated with the mixture. The sawdust was also enclosed in small sacks made of gauze, which could be conveniently placed over wounds. The results were as good as those obtained with iodoform. The cost was less than that of iodoform, and the sacks were comfortable cushions for the patient, and absorbed discharges very readily.—*Therapeutische Monatshefte, No.* 1.

Formulæ for Lanolin Salves.

The manufacturers of Dr. Liebreich's lanolin salves have published a list of formulæ for their preparation. The following are some of them: 1. Unguentum belladonnæ: Extr. belladonnæ 5.0, lanolini 45.0. Unguentum potassii iodidi: Potassii iodidi 20.0, aqua 10.0, adipis suilli 20.0, lanolin 150.0. 3. Unguentum carbolic.: Acid. carbolic. 5.0, adipis 5.0, lanolini 90.0. 4. Unguentum acid. pyrogallic.: Acid. pyrogallic. 10.0, adipis 10.0, lanolini 80.0. 5. Unguentum acid. salicylici: Acid. salicyl. 10.0, adipis 20.0, lanolini 70.0. 6. Unguentum hydrarg.: Hydrargyri 50.0, lanolini 12.5, ung. hydrarg. 2.5. 7. Unguentum iodoformi: Iodoformi 10.0, adipis 10.0, lanolini 80.0. 8. Unguentum chrysarobini: Chrysarobini 10.0 to 25.0, adipis 10.0, lanolini 80.0. 9. Unguentum picis liquid.: Picis liquid. 20.0, lanolini 80.0. 10. Unguentum ichthyoli: Ichthyoli 10.0, lanolini 90.0. The proportions given are parts by weight.

Strangulation of the Penis in the Head of a Hammer.

In the Polish bi-weekly *Wiadomosis Lekarskie*, No. viii., 1887, p. 243, Dr. Drobner, of Lvov, reports the curious case of a strong and healthy lad of 19, who came to the hospital with his penis tightly fixed in the head of a hammer. The iron weighed 1½ kilogrammes, and the hole measured 3 centimetres in diameter by 4 centimetres in length. The patient had inserted the organ (no doubt with a view to masturbation) about twenty-six hours before, and had since made many fruitless attempts to withdraw it; for the whole of that time he had been unable to pass water. The end of the penis was greatly swollen, its diameter being thrice that of the hole through which it had been pushed. It was only after making thirty deep incisions into the tumefied portion that the imprisoned organ could be liberated. Three weeks elapsed before the parts were restored to their natural condition.

Albuminuria in Diabetes.

Dr. A. Pollatschek, of Carlsbad, published (*Zeitschr. f. Klin. Med.*, xii., 4) some statistical results of the systematic examination of diabetic urine for albumen, with a view to determine whether the occurrence of the latter varied in proportion with the amount of sugar. He found that out of 1187 specimens containing sugar, in amounts varying from traces to as much as 5 per cent., there occurred more or less albumen in 437. The percentage (37) was almost the same, when reckoned on the cases examined in 1885, as on those of 1886, showing a curious uniformity. By grouping the specimens of urine according to their richness in sugar, he shows that there is no constant relation between the amount of albumen and of sugar—the lowest number of albuminurics (29.1 per cent.) occurring in cases of urine with a minimal quantity of sugar, and the highest (43.8 per cent.) in urine having from 2 to 3 per cent. of sugar.

Syphilitic Albuminuria.

M. Horteloup, after some remarks on three cases of albuminuria in syphilitic persons under his care in the Hôpital du Midi, and reported by Dr. Wickham to the Société de Médecine, gives the conclusions at which he has arrived respecting the relations between albuminuria and syphilis. 1. Syphilis may cause albuminuria during the first few months after contagion. 2. This form of albuminuria is easily curable by antisyphilitic treatment, and leaves no trace behind. 3. Such albuminuria ought to be distinguished from that which occurs during the second or third year of syphilis, and which is a much more serious matter as regards prognosis, for it may be looked on as the starting point of chronic nephritis, though this disease may only be found out long afterwards. 4. A syphilitic person, owing to the depression always caused by syphilis, becomes more susceptible to chill, and thus more predisposed to contract nephritis *a frigore*.

Phenate of Mercury in Syphilis.

Professor Gamberini, of Bologna, accepting the parasitic theory of syphilis, conceived the idea of associating a powerful parasiticide, namely, carbolic acid, with mercury, and from his suggestions MM. Boriani and Dallari easily succeeded in producing a preparation called the phenate of mercury. It is prepared by mixing a solution of phenate of potash with a solution of bichloride of mercury. The yellowish precipitate which forms is washed with distilled water until no trace of free bichloride remains. This new salt is prescribed in pills each containing 2 centigrammes (one-third grain), and made up with balsam of Tolu. Two pills a day are given to begin with, and the daily dose gradually increased to six. If more than this quantity is administered, gastro-enteralgia and stomatitis may be set up. The remedy has been employed successfully by the author.

Contagion in the Febrile Exanthemata.

Dr. D'Heilley insists on the proposition formulated by Dr. Girard, of Marseilles—namely, that contagion takes place at the beginning of, and even prior to, the eruption. He quoted the case of a children's party at which thirty-two children were present. Within ten days, twenty-four out of the thirty-two children had measles. Inquiry elicited the fact that one of the children had had measles the day but one after the party, and was already poorly the day of the party. One of the apparently non-infected children was playing with three others about a fortnight later, though a little out of sorts. The day after this child too had the measles, and the three other children also developed it after the usual delay. It is evident, therefore, that measles at any rate are capable of transmission before the eruption has appeared.

Case of Extra-Uterine Pregnancy.

The patient, 27 years of age, had already given birth to a child. The present pregnancy had gone on all right until between the second and third month. At this epoch she had a good deal of abdominal pain. At term false labor pains occurred, and extra-uterine pregnancy was diagnosed. Her condition, however, was such that it was only eight months later that an operation was decided upon. The incision, four centimetres long, was made above and parallel to Poupart's ligament, and as soon as the integument was cut through the fœtal head was seen. Craniotomy was performed and the fœtus extracted piecemeal, in order not to render it necessary to enlarge the opening further. The cavity was washed out with boracic acid solution, and a pre-existing vaginal fistula was utilized for drainage purposes. Recovery was rapid and complete.

Treatment of Burns.

Mosetig-Moorhof, of Vienna, in a series of recent articles in the *Wiener Med. Presse*, protests against the non-antiseptic treatment of burns so commonly carried out. He urges the iodoform dressing; has never seen intoxication from the drug, but the happiest results. After opening the blisters and cleansing the parts with a mild alkaline solution he applies a thick dressing of gauze prepared with iodoform dissolved in ether. Over the gauze he places a piece of gutta percha tissue, and over this a liberal layer of cotton. The wound secretions are absorbed by the cotton, which is readily changed, while the iodoform gauze remains upon the wound for, if needed, fourteen days. He anoints the face with 5 per cent. iodoform vaseline, and covers it with a mask of gutta-percha tissue.

Valerianate of Quinine.

Dr. D. Manuel Delfin reports in the *Cronica Medico Quirurgica*, of Habana, the results of the administration of valerianate of quinine in six cases of acute tetanus, founding the indications for its employment upon his belief that the disease is paludal in its origin. Out of six cases four recovered; one died, who was insane, and refused treatment; and the last one who died was a very severe case, who had once before recovered from tetanus under the use of the quinine preparation. In most cases the more usual remedies—bromides, chloral, etc.—had been previously exhibited without effect. The dose of valerianate of quinine employed at first was one gramme. It is not stated whether this was aftewards increased, or at what intervals it was repeated.

Ordinary Precautions in the Care of the Ears.

Hartmann, of Berlin, in a recent work on otology, gives the following advice:

Under ordinary conditions, the healthy ear does not need to be protected from cold; only during extreme cold or stormy or rainy weather ought cotton-wool to be inserted, into children's ears especially. The same precaution must be taken in the case of every ear predisposed to inflammation. All persons whose membranæ are perforated ought to protect their ears with cotton-wool. The entrance of cold fluids into any ear must always be prevented; and so, while bathing or diving, the ear ought to be plugged. Patients with perforations of the membrane should be very careful in this respect, as violent inflammation may be caused by the entrance of cold water.

A Monkey Affected with Yellow Fever.

During the epidemic of yellow fever which prevailed the first year in Caracas, (*Am. Pract. and News*) we had an opportunity to see in the house of one of our sisters a monkey with an undoubted case of yellow fever. The principal symptoms manifested themselves in a manner so marked that there remained not the least doubt that it was a case of yellow fever that we had before us. There was an injection of the eyes, a certain state of stupor, sharp thirst, nausea, elevated temperature, and at last prostration, anuria, and black vomit.

For three days the poor animal remained in this sad condition, each day growing worse, and presenting in succession the symptoms described, until the fourth day, when the case terminated fatally.

A Case of True Hysteria Cured by Hypnotic Suggestion.

The patient, consequent on peri-uterine inflammation, had the right ovary enlarged and painful, and grave symptoms of hysteria, for the treatment of which castration had been proposed. She was brought to the notice of Mr. Bernheim, who, after several séances, obtained a complete cure. M. Gron, whose patient she was, considered that in cases where grave nervous symptoms seemed to point to castration as a remedy, recourse to hypnotism should always be had before resorting to the operation. M. Bernheim

thought that much of the good which followed castration in these cases was due more to the moral than the physical effect of the operation.

The Microbe of Typhoid Fever.

At a recent meeting of the Société des Hôpitaux, M. Chantemesse made an interesting communication concerning the morphological and biological characteristics of the typhoid microbe. The sporulation of this microbe takes place between 19° and 48° C. (67° to 104.4° F.). It develops in water, even if sterilized. At a temperature of 45° C. (113° F.) the cultivations live for several days; they are destroyed by boiling. This microbe retains its vitality in damp ground. Corrosive sublimate (1 : 20,000) and sulphate of quinine (1 : 800) destroy it. Carbolic acid (1 : 400) has no effect on it; hydrochloric acid is also inert; therefore, the acidity of the stomach is not inimical to this microbe.

A Syphilitic Placenta.

M. Debray described at a recent meeting of the Brussels Anatomical and Pathological Society some peculiar appearances presented by the placenta of a woman who said she had had syphilis a year before her confinement, but who certainly had chancres and a specific roseolous rash at the time. The confinement was at term, and the placenta was removed with some difficulty three hours after the child was born. It was hard and abnormally small. Microscopic examination showed the presence of connective tissue fibres and of numerous plastic elements lying between the connective tissue bundles and forming arterio sclerotic rings round the vessels.

Treatment of Hydrocele by Injections of Corrosive Sublimate.

The solution used is one part of the salt in 1,000 of water. The operation is the same as for injecting iodine. The tunica vaginalis is punctured, and from 200 to 250 grammes of the solution are injected, according to the capacity of the pouch. The scrotum is gently manipulated, and half the solution is then allowed to drain away. It acts as an irritant and gives rise to an inflammation which, while not severe enough to cause suppuration, is sufficient to set up adhesion. There is very little pain. No constitutional symptoms have been observed beyond a slight elevation of temperature.

Incomplete Hæmatocolpos.

V. C., aged 16, domestic servant, first menstruated a year ago, since when there has been a constant discharge of blood. She complains of general malaise and pain in walking. On examination, the hymen was found to be intact and completely closing the vagina. Blood was seen to ooze from two little capillary orifices; these evidently were not large enough to permit of the free egress of the menstrual discharge. An incision was made with the scissors, and a quantity of retained blood escaped. On the next day all discharge had ceased, and twenty-two days after the period appeared naturally.

Enemata of Defibrinated Blood.

Cases in which enemata of defibrinated blood have been employed in the treatment of chlorosis and acute anæmia are reported by Dr. Valera in the *Siglo Medico*, and by Dr. Mariani in the *Revista*. Dr. Valera's case was one of extremely severe post-partum hemorrhage, and was combined with the use of the cold douche. Dr. Mariani's cases appear to have been instances of simple anæmia. In each case improvement is stated to have been rapid, and the recovery permanent; but the details as to the mode of administration, or the nature of the blood employed, are not given.

Prescriptions for Amenorrhœa.

Upshur, of Richmond, Va., in "Disorders of Menstruation," gives the following as his favorite formulæ in anæmic amenorrhœa:

℞. Tinct. ferri chlorid., ℥ j.
Liq. chlor. arsenici, ♏ ij.
Strychniæ, gr. j.
M. Sig.—Gtt. xx. t. i. d., after meals in water.

℞. Tinct. ferri chlorid., ℥ ss.
Acid. muriatic. dil., ♏ iij.
Liq. chlor. arsenici, ♏ ij.
Hydrarg. bichloridi, gr. j.
Syr. zingiberis, ℥ ij.
Aquæ, ad. ℥ vj.
M. Sig.—Take a teaspoonful in one-third of a tumbler of water three times a day, after meals.

Inhalations of Defibrinated Blood.

Dr. Escorileada also records in *El Genio Medico Quirurgica* an example of extreme anæmia with anorexia occurring in a female patient, aged 29, in which defibrinated and diluted bullock's blood was given in the form of a spray by inhalation, as recommended by Jubini, the defibrinated blood being in the proportion of 80 per cent, to 20 per cent.

of .75 per cent. salt solution. Other treatment had failed to improve the nutrition, but visible improvement was noted after four inhalations. Cold affusion with sea-water was also employed.

How to Give Castor Oil.

Dr. Field, in a recent book, "Evacuant Medication," gives the following formula as useful in administering castor oil, especially in dysentery and enteritis, when purgation and a healing and tonic influence is required:

℞.	Ol. terebinth.,	gtt. 80.
	Ol. cinnamon,	♏. 5.
	Ol. ricini,	ʒ 5.
	Mucil. acac.,	q. s.
	Syr. simpl.,	q. s.
	Aq. puræ, q. s. ad.	ʒ 2.

M. Sig.—Shake thoroughly. One teaspoonful, repeated *p. r. n.*

Ammonium Picro-Nitricum.

May be given, for malarial infection, as follows:

℞.	Ammonii picro-nitrici,	gr. 5 to gr. 23.
	Pulv. rad. liquiritiæ,	
	Succi liquiritiæ, āā	♏ 23.

M. Ft. pil. xxx. in num.

These pills should be prepared with moist excipient, as picric acid forms explosive compounds in the dry state.

An Ointment for Freckles.

Hebra:

℞.	Hydrarg. precipitat. albi.,	gr. 75.
	Bismuth. subnitrat.,	gr. 75.
	Glycerinæ unguent.,	ʒ 5.

M. Ft. unguentum.

Sig.—Apply every 2 or 3 days; it will irritate if used too frequently.

Prescription for a Convenient Quinine Pill.

℞.	Quinine sulph.,	gr. 30.
	Sacch. alb.,	
	Gummi Arab., āā	gr. 15.

M. Ft. pil. xxx. in num.

These pills are very soluble, and make up well.

Chorea Cured by Antipyrin.

Wallner reports a case of a girl aged 16, whose disease had resisted other remedies, who was cured by 15 grains of antipyrin three times daily. The cure was complete in twelve days.—*Therapeutische Monatshefte*, No. 1.

News and Miscellany.

Commencement of the Medical Department of the University of Pennsylvania.

The commencement exercises of the Medical Department of the University were held at the Academy of Music on Monday the 2d inst. at 11 a. m.

After prayer by Rev. Dr. H. J. Morton, the degrees in medicine were conferred by Dr. William Pepper, Provost of the University. The medical graduates were:

NAMES OF THE GRADUATES.

Americus R Allen, George E. Andrews, A. B., William A. Atlee, Jr.

George Fales Baker, B. S. Tilghman, M. Balliet, A. B., Delbert Barney, A. B., Reuben H. Bemish, T. Passmore Berens, Cuthbert F. Bowen, B. A., David P. Bowman, B. E., Edward T. Bradley, Leon Brinkmann, Samuel W. Burns.

George A. Cameron, Paris T. Carlisle Jr., Henry W. Cattell, A. B., Joseph G. Church, J. A. Coleman Clarkson, A. B., J. Vale Cleaver, Cary K. Clewell, R. Percy Crandall, George C. Curtis, D. D. S., Millard F. Cyphers.

James A. Davis, Ph. G., Charles Dingee, John George Doron, A. B., Malcolm Douglas, Jr.

Lambert H. Edgar, Thomas C. Ely, Jr., Ph. B., Alexandro Espinoza.

William W. Farr, Alexander G. Fell, B. S., Charles Fitzpatrick, Jr., William M. Frost, A. B., George B. Fundenberg, Jr., A. M.

John P. Gale, S. A. Mercer Givin, George B. Glover, A. B., Horace S. Grant, Elijah Griffith, Thomas A. Grigg.

Thomas H. Hartswick, Charles A. Hartzell, Joseph Head, D. D. S., John Clement Heisler, Ph. G., Alfred Davis Henkel, Arthur C. Hugenschmidt, D. D. S., Charles D. Hunt, Randall Hutchinson, A. B.

John E. Jennings, Theodore M. Johnson, Ph. G., Kent C. Jones, Le Roy H. Jones.

Louis J. C. Kimmell, Pearce Kintzing, B. S., Ellwood R. Kirby, Ira D. Knotts.

Alfonso Lacayo, A. B., Frederick Lambach, Jr., Joseph Leidy, Jr., A. B., Jere W. Lord, A. B.

Jose J. Macias, Ph. B., Jacob F. Marchand, A. M., Bernard G. Maercklein, D. D. S., Charles B. Martin, Peter J. J. Martin, James M. Maurer, A. B., Leonidas L. Mial, A. B., Peter F. Moylan, John B. McAlister, A. B., Charles A. McCauley, John W. McCauley, A. B., Robert McCreight, Ph. G., John J. McDonald, M. D.

S. Pusey Nickle, Richard C. Norris, A. B., Frederick W. Prentice, M. D., William L. Pyle.

Benjamin B. Reath, Jr., A. B., Jeremiah V. Reeder, George F. Roessler, Ph. G., Francis Rudderow, A. B.

Sebastian Salinas, B. S., Joseph R. Smith, Theodore Sprissler, Ph. G., B. Franklin Stahl, Ph. G., James Stein.

Frank W. Talley, William B. Taylor, A. B., William C. Townes. Ph. B., John Harry Trout, Ph. G., Thomas Turnbull, Jr., Richard Raymond Tybout.

William J. Walker, George D. Weston, B. S., Sven Windrufva, M. F. C., John A. Witherspoon, Stephen Carroll Wood, A. B.

DR. GOODELL'S ADDRESS.

Dr. William Goodell, the professor of clinical gynæcology, then delivered the valedictory address. After special reference to his thirty-three years, experience he said:

"The influence of an honored physician in this community is always great. He and the clergyman and the lawyer are often the only educated men in their village. As the title which you have just now received at the Provost's hand, as the word 'doctor' means, you are to be teachers as well as healers—the educators and refiners of those among whom you cast your lot. One man of you—and by 'man' I do not mean one who hangs about tavern porches or lounges about drug stores—one man of you, I say, can give tone and character not only to a township but to a county. However popular you may be with your fellow townsmen, do not accept all the honors they may thrust upon you. To be at the same time mayor of your borough, chairman of your school board, and an active politician, is a great mistake. Remember that the profession you have chosen is a mistress too imperial and too imperious to brook a rival." Dr. Goodell specially warned his hearers against intemperance, and impressed upon them their duty in elevating the profession and maintaining its dignity.

Prizes were awarded as follows:

The *Medical News* prize, $100, divided between Dr. Arthur C. Hugenschmidt, Paris, for his thesis, "Experimental Studies upon Man," and Peter J. Martin, of Pennsylvania, for his thesis on "Physiological Action of Antipyretics."

The award of "distinguished merit" was given to F. Passmore Berens, for his thesis on "Amylolytic Ferment of Human Milk."

"Honorable mention" was awarded to William C. Townes, of Mississippi, for his thesis. "A Continual Study of the Tumors Removed at the Surgical Clinics of the University Hospital, January to June, 1886," to Sven Windrufva, of Sweden, and Randall Hutchinson, of New Jersey.

The following prizes were awarded by Dr. J. William White, Demonstrator of Surgery, for proficiency in operating and bandaging: A copy of Agnew's "Surgery," to Joseph Head, of Pennsylvania; a surgical pocket case to Joseph Leidy, jr., of Pennsylvania. A third prize for the same work, offered by J. B. Lippincott Company, a copy of Agnew's "Surgery," was awarded to Sven Windrufva, of Sweden. The operating and bandaging of the following graduates received honorable mention: Richard J. Norris, of District of Columbia; Randall Hutchinson, of New Jersey; Leonidas Mial, of North Carolina; W. J. Walker, of Pennsylvania, and Peter J. Martin, of Pennsylvania.

Dr. N. Archer Randolph, Professor of Hygiene, awarded to Samuel M. Wilson, Pennsylvania, a Zentmayer's histological microscope for the best examination on hygiene. J. L. Hatch, of the auxiliary department of medicine, received honorable mention of his work on hygiene.

William M. Abach, of Pennsylvania, received a copy of Agnew's "Surgery," for proficiency in bandaging by first year students.

In this same line of work honorable mention was accorded Joseph P. Tunis, of Pennsylvania; Albert S. W. Johnson, of Nassau, W. I.; W. C. Posey, of Pennsylvania; Alfred Stengel, of Pennsylvania, and Clarence A. Butler, of Pennsylvania.

H. M. Keller, of Stroudsburg, was announced as one of the graduates, but his diploma was withheld until next year, because he was not of age.

The exercises closed with the benediction by Dr. Morton.

THE ALUMNI DINNER.

In the chapel of the University, on the evening of the same day, the alumni association of the Medical Department held its seventeenth anniversary banquet. At the head of the table was Dr. R. A. Cleeman, and around it were gathered over 150 graduates.

The first toast was the "Faculty," and was responded to by Dr. Horatio Wood. He paid tributes to many members of the faculty, and especially referred to Professors Jackson, Hodge and Leidy.

"The Relations of the Profession to the Community," was responded to by Talcott Williams.

"The Medical Press" was responded to by Dr. N. Archer Randolph, "The Class of '77" by Dr. Formad, and "Our Sister College" by Dr. Parvin, of the Jefferson College.

The committee having the arrangements in charge consisted of Dr. Cleeman, Dr. S. D. Risley, Dr. H. A. Hare, Dr. William Pepper, Dr. James Tyson, Dr. H. R. Wharton, Dr. William Barton Hopkins, and Dr. T. R. Neilson.

Among those present were: Dr. Huidekoper, Professor Wormley, A. Sydney Roberts, L. Clark Davis, Professor Agnew, Dr. I. Massey, of West Chester; Dr. Hartswick, of Clearfield.

Sudden Death.

"I fear you are too late," said the husband, as he hurried me to the apartment where his wife, from sudden failure of the heart's action, was lying insensible, and as the nurse informed me, "dying." It was impossible to administer by the mouth a restorative, so without delay I injected hypodermically twenty drops of ether, sp. gr. 0.720, and, as the improvement was not as quick as I desired, forthwith twenty drops more. To the complete astonishment and great delight of the friends, consciousness and strength rapidly returned.

The sudden deaths which have so lately thrilled the public mind, more especially the death of Lord Iddesleigh, in London, and Mr. Christopher Bushell here, have influenced me to send you the above record, not as the proclamation of a new discovery, but as a suggestion—a suggestion in connection with the alarming newspaper reports which usually run somewhat thus: "Mr. —— suddenly became ill, when, sinking, he was supported by his friend. Dr. ——, who happened to be present, was most assiduous in his attention, but at last pronounced life extinct." Should it not be impressed on the public that the easiest mode in which respiration can be carried on is when the body is extended at full length—not lying on the back, but with the inclination towards the prone position? Nature throws down to assist the encumbered circulation; the officious kindness of indiscretion and ignorance supports the fainting sufferer. Again, would it not be well in these times of frequent sudden deaths from weakened hearts that each medical man should have in his possession, ready for immediate use, his hypodermic syringe case, with its little bottle filled with ether? Would it not be well, too, that the possessor of a weak heart, or, better still, the friend who accompanies him, should also have the ether and syringe ready for instant employment? Ladies with neuralgia practice hypodermic injections of morphia by the advice and under the direction of physicians. This I would condemn. But the friend of a valuable life, the tenure of whose leasehold is uncertain through the possession of a weakened, or flabby, or a fatty heart, might well be instructed in the use of the subcutaneous injection of ether. More than one example might be adduced to show that the immediate stimulant might rouse the flagging pulse-throb; and then, instead of the announcement that "life was extinct," one might read that after the injection the the appalling symptoms quickly passed away, and what appeared to be approaching death gave place to the renewed energy of life, with all its usefulness.—*Lancet April* 23, 1887.

The Association of Genito-urinary Surgeons,

Which has lately been organized with Dr. Edward L. Keyes, of New York, as temporary chairman, and Dr. Robert W. Taylor, of New York, as temporary secretary, will hold its first annual meeting at the Laurel House, Lakewood, N. J., on Tuesday and Wednesday, the 17th and 18th of May. In addition to an address of welcome, by the temporary chairman, the programme includes the following named papers: "The Connection between Masturbation and Stricture of the Urethra," by Dr. S. W. Gross, of Philadelphia; "On Chancroid," by Dr. F. B. Greenough, of Boston; "On Horny Growth of the Penis, with exhibition of a Remarkable Case," by Dr. J. H. Brinton, of Philadelphia; "Supra-pubic Cystotomy for Vesical Tumor and Large Calculus, with Comments upon Suture and a Suggestion for Drainage," by Dr. E. L. Keyes, of New York; "Case of Hysterectomy for the Relief of Pyelitis from Obstruction," by Dr. A. T. Cabot, of Boston; "On the Choice of Operation for the Removal of Vesical Calculus in Cases complicated by Prostatic Obstruction," by Dr. J. P. Bryson, of St. Louis; "Idiosyncrasy as affecting the Specific Treatment of Syphilis," by Dr. P. A. Morrow, of New York; "Observations on the Use of Oil of Wintergreen in the Treatment of Gonorrhœal Rheumatism," by Dr. R. W. Taylor, of New York; "Some Cases of Pyelitis in which Frequent and Painful Micturition was the Chief Symptom," by Dr. George Chismore, of San Francisco; "On Temporary Over-strain of the Bladder producing Chronic

Retention of Urine," by Dr. F. N. Otis, of New York; "Early Syphilitic Epididymitis," by Dr. J. N. Hyde, of Chicago; "Prostatotomy for Obstruction—Two Cases," by Dr. A. T. Cabot, of Boston; "A Plea for the More General Use of Nitrate of Silver in the Deep Urethra, with an Improved Instrument for its Application," by Dr. E. L. Keyes, of New York; "A Rare Form of Septicæmia following Operation for Urethral Stricture—*Septicémie foudroyante gazeuse*," and "Exhibition of Sections of Tubercular Testes with Bacilli, and of the Coëxistent Bacilli in the Sputum," by Dr. R. W. Taylor, of New York.

Terebene and the London Apothecaries.

A correspondent of the *British and Colonial Druggist* says: "I am, as you are aware, 'connected with the trade'—the last word should perhaps have been 'profession,' but that will not affect the value of my narrative. Staying in London for a few days was a friend of mine, and as one evening this week we were investigating the mysteries of the metropolis it became apparent that his interest was beginning to flag. With the instinct of a pharmacist who may one day have to prescribe in order to pay his rent and taxes, I soon detected reflections of physical pain in the countenance of my companion, Ably following up the symptoms, I arrived at the truth—stomachic inflation. Good! Terebene indicated. Get some. To the nearest chemist we went. He was busy. Happy man! Five real customers in his establishment at one time. Not revealing 'my connection with the trade,' I modestly preferred a request for five drops of terebene in a little water. 'Terebene?' quoth the professional gentleman behind the counter. I assented. 'Terebene?' he repeated; 'what for?' 'Flatulence.' He smiled broadly. 'Terebene!' he continued. 'I've heard of "Terebene Soap."' Again smiling in a manner which plainly meant 'I am a man of superior knowledge, but I'll give you another chance,' he inquired, 'Are you sure it's *terebene?*' I was. Then came his thunderbolt. 'Why, terebene's a kind of turpentine. You don't want to take that internally.' I was crushed, and we retired.

"We had an almost similar experience in the next pharmacy we went to, and I was there told I must be mistaken about the name. I must mean 'peppermint.'

"Three more establishments were visited, but none of them had terebene in stock. All these five pharmacies were in the W. C. district, and in selecting these to call at I avoided, after my interview with the 'Terebene Soap Man,' several shops of inferior size as being unlikely places to get what I wanted."

Official List of Changes

OF STATIONS AND DUTIES OF MEDICAL OFFICERS.

Medical Department U. S. Army, April 26 to May, 2, 1887:

Major John S. Billings, surgeon, granted leave of absence for ten days, to take effect May 3, 1887. S. O., 98, A. G. O., April 28, 1887.

First Lieutenant Chas. E. Woodruff, assistant surgeon—(Recently appointed), ordered for duty at Ft. Wayne, Mich. S. O., 96, A. G. O., April 26, 1887.

Medical Corps of the Navy, for the week ending April 30, 1887:

Assistant Surgeon L. W. Atlee, ordered to the Receiving-ship Vermont.

Past Assistant Surgeon Clement Biddle, detached from the Naval Academy, and to Marine Rendezvous, Philadelphia, Pa.

Past Assistant Surgeon Richard Ashbridge, ordered to the Naval Academy.

Medical Inspector A. Hudson, ordered to the United States Steamship, Trenton.

Past Assistant Surgeon C. T. Hibbett, ordered to the United States Steamship, Trenton.

Assistant Surgeon Corbin J. Decker, detached from the Receiving-ship, St. Louis, and to the United States Steamship, Trenton.

U. S. Marine Hospital, for the three weeks ended April 30, 1887:

Goldsborough, C. B., surgeon. Leave of absence extended thirty days on account of sickness. April 20, 1887.

Devan, S. C., past assistant surgeon. Granted leave of absence for thirty days, to take effect when relieved. April 12, 1887.

Bratton, W. D., assistant surgeon. To proceed to Port Townsend, W. T., and assume temporary charge of the service. April 21, 1887.

A Chance for Anti-Tobacconists.

The Société contre l'Abus du Tabac offers the following prizes: 1. A prize of 500 francs ($100), with a gold medal worth 100 francs ($20), is offered by Dr. Depierris to medical students belonging to any school in France for the best treatise on "Nicotic Cachexia: its Symptoms, Progress, and Effects; demonstrated by at least eight clinical observations, made either in the hospitals or in civil or

military practice." It may be written in the form of a thesis, but this is not obligatory. The prizes are open to all students, no matter what their standing. Other medals will be awarded to the authors of any treatise of exceptional scientific value. 2. A prize of 900 francs ($180) (*Prix des Gens de Lettres*), with a gold medal worth 100 francs, is offered by Dr. Depierris for the best treatise on "The Effects of Tobacco on the Health of Men of Letters: its Influence on Future French Literature." 3. A prize of books worth 200 francs ($40) (*Prix de Médecine*) is offered for the four best detailed reports of cases (including etiology, symptoms, termination, etc.) of affections due exclusively to the abuse of tobacco. A medal will also be awarded with this prize. The essays may be written in French, English, German, Italian, or Spanish, and they must be sent in before December 31st, 1887. Full particulars as to the conditions of the competition will be forwarded free, on application to the President de la Société contre l'Abus du Tabac, 38 Rue Jacob, Paris.

The Pennsylvania Hospital.

The 136th annual meeting of the contributors to the Pennsylvania Hospital was held on Monday, May 2.

From the report of the Board of Managers it appears that the total number of cases treated at the hospital during the past year was 13,401, the expenses for the maintenance of the sick, $64,158.77. The report mentions the introduction of a new system of hospital management, which supplies closer bedside administration, and separates from the latter the general housekeeping duties.

The antiseptic treatment, which has recently been thoroughly established at the hospital, was dwelt upon at some length.

On Wednesday, the 4th instant, Dr. John Ashhurst was elected as one of the surgeons of this institution, *vice* Dr. Richard J. Levis, resigned. His acceptance has not yet been received.

The Expense of Quackery.

There are in San Francisco, says the *Pacific Record*, one hundred and twenty-five illegal practitioners—*i. e.*, those whose ignorance is so appalling that they could not obtain a license from any of the examining boards. In the State there are over five hundred of this class. Some of them spend large sums monthly for advertising. We know of one whose advertising bills are two thousand dollars a month. Two practitioners on Kearney Street spend each one thousand dollars a month, and one on Market, two thousand. This last declares that his receipts from his practice and sale of nostrums will average *one hundred dollars a day*. The amount (average) filched from their dupes by each of these swindlers cannot be less than two hundred dollars a month, or one hundred thousand dollars in the aggregate. This is $1,200,000 a year.

Addresses in the General Sessions of the International Medical Congress.

Many of the medical journals in this and other countries have announced the fact that Professor F. Semmola, of Naples, Italy, is to give a general address on "Bacteriology and its Clinical Therapeutics," to the Congress in general session; and we will add that general addresses are also promised by Dr. Neudorfer, of Vienna, Austria, "On the Military Medicine of the Present and of the Near Future;" Dr. Esmarch, of Kiel, Germany, "On Bloodless Operations in Surgery;" Dr. Lutaud, of Paris, France, "On the Influence of the Discoveries of American Surgeons on the Development of Gynecology in Europe," and Dr. Austin Flint, of New York, N. Y., on "Fever, its Cause, Mechanism and Rational Treatment"—all topics of interest to the whole profession.

The Congress.

The *New England Med. Monthly* says: As time slowly passes, the Executive Committee of the Ninth International Medical Congress keep pace with its arrangements for the successful conduct of this important meeting. Advices constantly received by them from abroad indicate without a doubt that there will be large and influential delegations from France, Germany, England, Ireland, Austria, Denmark, and other countries. That these delegations will be representative, is indicated by the fact that the gentlemen offering to read papers before the various sections are men of world-wide reputation. The local committee of arrangements have been actively at work, and we are warranted in saying that the social part of the meeting will be all that the most fastidious could desire.

Charcot.

George Augustus Sala says: Dr. Charcot is surely one of the most ingenious of the

medical mankind. He is a specialist in hysteria and hypnotic cases, and I read that, having satisfied himself as to the practicability of transferring paralysis, nervous contractions and cataleptic symptoms from one patient to another, he is now about to extend his experiments to hysterical dumbness. A female patient affected in this manner was placed back to back with a woman who had been for a long time cataleptic. By means of the magnet the dumbness was transferred from one patient to the other with the same regularity as marked the experiments in paralysis. By continuing these tests, Dr. Charcot hopes to be able to completely restore speech to tongue-tied patients.

Longevity of the "Friends."

The "Friends" are noted for their simple modes of life and their close observance of all the laws of hygiene and of health, and their vital statistics speak louder than a voice of flame for closer attention to public health. Of the 229 "Friends" who died last year in Great Britain and Ireland, only 22 were under five years of age; between five and ten years were five deaths; between ten and twenty years, 9; from twenty to thirty years the deaths numbered 18; from 30 to 40 years, 16; from 40 to 50 years, 22; from 50 to 60 years, 23; from 60 to 70 years, 51; from 70 to 80 years, 74; from 80 to 90 years, 69; from 90 to 100 years, 10. The low infantile mortality and the large percentage of deaths at great ages are remarkable even for the Society of Friends.

Hygienic Congress.

On May 8, the Federation of the Italian Hygienic Societies will hold its first Congress in Florence. The sittings will last till the 10th, and among the proceedings will be a discussion on the new code of public hygiene submitted to the Italian Senate by the Prime Minister, Depretis, and a paper by the Senator, Professor Pacchiotti, of Turin, on the "Vaccinazione Anti-rabica" of Pasteur. The great *feste*, of which during the first three weeks of May the Tuscan capital will be the seat, form an attraction of which the promoters of the Congress will avail themselves for enhancing the success of their inaugural meeting.

Louisiana State Medical Society.

The ninth annual meeting of this Society was held in Alexander, La., April 11, 12, 13, 1887. Valuable papers and reports were presented, and several topics of special interest to the profession of that State were discussed. The following officers were elected for the ensuing year: President, Dr. Joseph Jones, New Orleans, La.; Vice-Presidents, Drs. F. H. Parham, of New Orleans, H. D. Bruns, of New Orleans, Thomas Hebert, of New Iberia, F. M. Thornhill, of Arcadia, I. J. Newton, of Bastrop, and T. T. Tarleton, of St. Landry; Secretary, Dr. P. B. McCutcheon, of New Orleans. The next annual meeting is to be held at Monroe, La., on the third Wednesday in April, 1888.

Tennessee State Medical Society.

At the annual meeting of this society, held in Nashville, April 12 and 13, 1887, the following officers were elected for the ensuing year: President, Dr. P. D. Sim, of Chattanooga; first Vice-President, Dr. Happel, of Trenton; second Vice-President, Dr. R. Douglas, of Nashville; third Vice-President, Dr. J. M. Masters, of Knoxville; Secretary, Dr. Ambrose Morrison, and Treasurer, R. Cheatham.

The society contribnted $250 for the Treasury of the International Medical Congress to be held in Washington, D. C. Its next annual meeting, in 1888, will be held at Knoxville.

Medical Association of the District of Columbia.

At the regular meeting of this Association, held April 5, 1887, the following officers were elected for the ensuing year: President, Dr. J. W. Buckley; Vice-Presidents, Drs. J. W. Bayne, and W. O. Baldwin; Secretary, Dr. Lachlan Tyler; and Treasurer, Dr. S. S. Adams.

Chicago Medical Society.

At the annual meeting of this Society, held at the Grand Pacific Hotel, April 4, 1887, the following officers were elected for the year: President, Dr. Wm. T. Belfield; Vice-Presidents, Dr. J. H. Etheridge, and Dr. A. E. Hoadley; Secretary, Dr. Frank Billings; and Treasurer, Dr. H. N. Moyer.

American Dentists in Berlin.

Under date of March 30th, the Polizei-Präsident advertises in the "Deutsche Medizinal-Zeitung" a decree ordering all persons not possessed of an approved medical quali-

fication to discontinue within three months the use of the title "American dentist" on signs, cards, etc. The reason given is, that the title so resembles that of a physician that it may give the impression that the bearer of it is "eine im Inlande approbirte und geprüfte Medicinal Person."

Education of Women in Germany.

Of late the Prussian Minister of Education has had several applications made to him to admit women as students at the universities. His reply is, that women are not to be admitted as regular students at any Prussian university, nor at any of the medical schools.

The University of Berlin.

The *Lancet* states that Dr. Olshausen, of Halle, has accepted an invitation to fill the late Professor Schroeder's chair of obstetrics, and will begin his lectures on the 1st of May.

Items.

—Dr. Davis (*Therap. Gaz.*) states that tea-drinking acts in the direction of producing sterility in females.

—Dr. Lewis Sayre's Clinical Lectures on Orthopædic Surgery have been translated into French by Dr. Henri Thorens.

—The Ontario Medical Association will hold its seventh annual meeting in Toronto, on Wednesday and Thursday, June 8th and 9th.

—The term of service of Surgeon-General Gunnell, as Chief of the Bureau of Medicine and Surgery of the Navy, expires in March, 1888.

—According to *L'Union Médicale*, M. Lannelongue has been elected to succeed the late M. Béclard as a member of the Academic Council.

—The American Climatological Association will hold its fourth annual meeting in Baltimore, on Tuesday and Wednesday, May 31st and June 1st.

—The State Medical Society of Arkansas will hold its twelfth annual meeting in Little Rock, on Wednesday, Thursday, and Friday, June 1st, 2d, and 3d.

—The Trustees of the University of Pennsylvania have just received the preliminary report of the Seybert Commission, in regard to its investigation on the subject of spiritualism. It was ordered to be publishe[d]

—It is reported (*L'Union Médicale*) that a case of opium narcosis was relieved by nitrite of amyl after belladonna had failed, and the patient was almost dying.

—A writer in an exchange says that in experiences in Colorado and Utah he never saw an Indian with a cold. He concludes that it is our hot rooms that give us colds.

—Retention of urine may frequently be relieved by a sudden dash of cold water upon the supra-pubic region, or will prove amenable to the application of ice to the perineum, or its introduction into the rectum.

—A Parisian doctor prescribed for a lady who had objections against growing stout: "Take exercise, my dear lady. Consider the trees of the field; they never take exercise, and as a consequence they go on growing bigger and bigger every year."

—Inebriety cannot be prevented by throwing the responsibility on the inebriate, and punishing him for this as if for a crime. He is a sick man, and must be taken out of his surroundings and fully quarantined until he can recover.—*Quarterly Jour. Inebriety.*

—For the relief of the violent pains that in some women precede the menstrual flow, Dr. Meniére, of Paris, gives a warm water enema, containing thirty grains of chloral, and thirty grains of bromide of potassium. For young women one-half of the above quantities should be prescribed.

OBITUARY NOTICES.

Moritz Schuppert, M. D.

New Orleans, May 3.—Dr. Moritz Schuppert, the eminent surgeon, died last evening, aged sixty-nine years.

Alexander Leslie, M. D.

Evansville, Ind., May 3.—Dr. Alexander Leslie, of Petersburg, Pike county, Ind., died on Sunday. He was one of the oldest practitioners in this section, seventy-three years of age, and having practiced fifty-four years.

John M. Dallam, M. D.

The death of Dr. John M. Dallam, in Tioga on Monday last, is announced. He was born near Baltimore sixty-one years ago. His ancestors were among the earliest settlers in Maryland, and prominently identified with the American Revolution. The Doctor studied medicine in the University of Pennsylvania, and his professional life has been spent in this city, and mainly in the community where he died.